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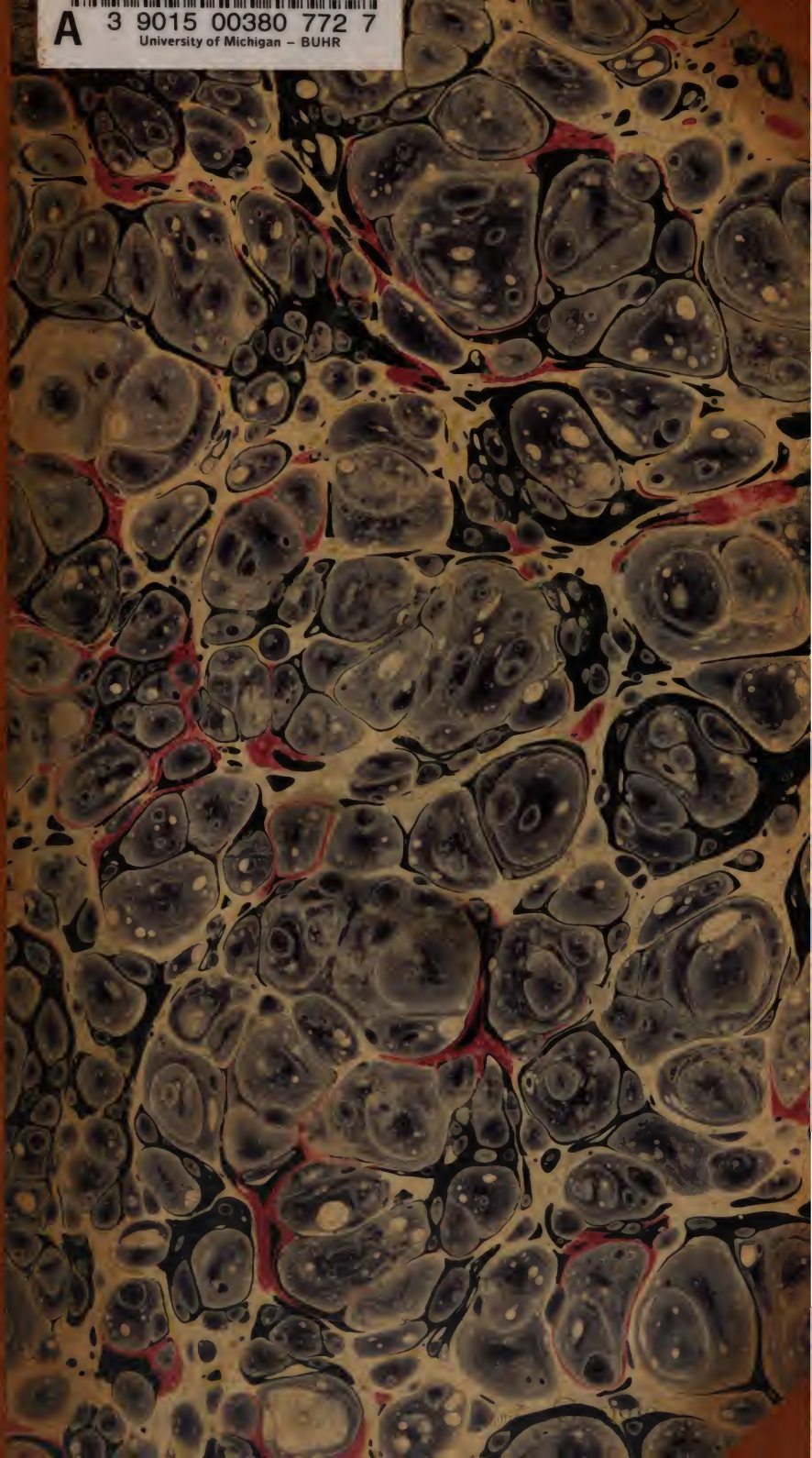
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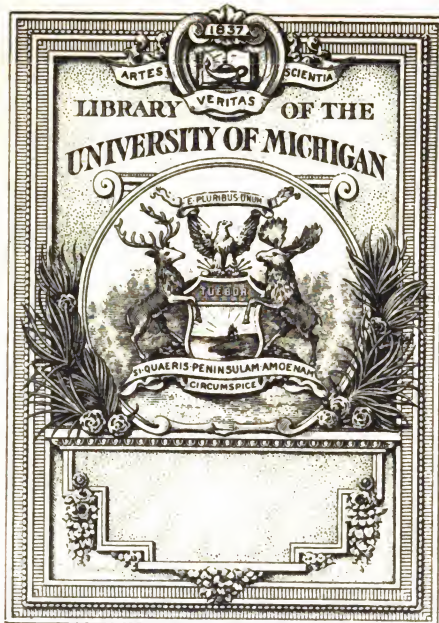
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&c. &c. &c.

"Nec tibi quid liceat sed quid fecisse decebit
"Occurat mentemque domat respectus honesti."—CLAUD.

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[FASCICULUS VII.]

APRIL 12, 1828.

ARTICLE I.

FEVER.

1. *Dictionnaire de Médecine ; Articles, FIEVRE—GASTRO-ENTERITE.*
M. M. COUTANCEAU et RAYER.
2. *A Practical Treatise on the Typhus, or Adynamic Fever.* By JOHN BURNES,
M. D. &c.

It is, we think, much to be lamented, that, the noble example set by our Gallic brethren, in the publication of two successive voluminous dictionaries of medicine and its collateral sciences, should not have been followed by any similar undertaking on this side of the Channel. In a department of knowledge, as yet so essentially progressive, so mutable in its doctrines and in the manner of their application to practice, there is nothing which, in our opinion, can so effectually contribute to improvement as short, concentrated monographs on particular diseases, frequently given to the public, in a collected and alphabetic form, as in the work from which we select the present articles.

The usual obstacles to publication on select and favorite topics—the demand, on the part of the bookseller, for a certain quantity of matter—the apprehension, on the part of the author, that he may not be able to distend his subject to the necessary bulk, without either hiding, or disfiguring its best features, are all removed by the plan of collective labour in a dictionary, such as that now before us. Here the collaborateur furnishes a dense, perspicuous treatise, containing an epitome of every thing that has been done by others on the subject, up to the hour in which he writes, together with his own opinions, and the results of his observation and experience. The name of the writer being affixed to each article, makes him responsible to the public for his own production, and enforces, by the strongest ties we have upon mankind, their interest and fame, the necessity of making his Essay the best that he can furnish.

There is an amiable, and we conceive, an enviable peculiarity, in many of the French works of science. We often find some of their best productions under a double signature. Two friends, emulous in the pursuit of knowledge, agree to make their researches together; they assist and stim-

ulate each other, and the result of their joint labour, is generally something superior to what either of them could have singly effected. We can boast of but few examples of this kind of literary partnership, particularly in our medical writings.

The distinguished authors of the Essays now before us, are already too well, and too favourably known to the public, to require any bibliographical notice of their works from us. M. Rayer more especially, the joint author of the first (*Fièvre*) and the sole author of the second article (*Gastro-Enterite*) at the head of this review, has given us, in his book on the Diseases of the Skin, a sufficient guarantee, as to the strength of his mind and the accuracy of his conceptions.

Although the French medical writers are generally remarkable for the precision and method, with which they treat their subjects, we cannot, we fear, hold up the article *fièvre*, as a very marked example of lucid arrangement of parts. It possesses, however, many excellencies to compensate for this deficiency. The following appear to us to be the chief objects of the first monograph.

1st. Our authors consider the word *fièvre*, with its Greek, and Latin synonymes, as a name used to represent one, or more morbid phenomena.

2ndly, They enter into "*general considerations*," on the subject of fever, and, under this head, they pass in review the opinions, as to its nature and cause, of the most celebrated pyretologists, ancient as well as modern, chiefly with a view to decide this important question, viz. whether the fevers of authors, but more particularly those of M. Pinel, ought to be considered as essential, idiopathic affections of the system, or merely as "physiological expressions of some local disease?"

3rdly, They give the conclusions to which their own researches and observations have led them with regard to this question, and for the pathology and treatment of the inflammations causing, or constituting, (in their opinions) all fevers, they refer to the distinct heads, *Enterite*, *Gastro-enterite*, *Meningite*, &c.

In endeavouring to open any thing like a clear path, through the dense cloud of theories that has hitherto hung over the various doctrines of fever, like the mist over the Valley of Mirza, we shall take our authors as our guides, reserving to ourselves, however, the privilege of making our own arrangements for the undertaking.

1. "The word *fièvre*, *fever*, *febris*, from *fervere*, to boil—*πυρετός* from *πῦρ* fire, is not, say our authors, a substantive, of which the singular is not more distinct than the plural, as some have ironically observed; it is a substantive, the plural and singular of which have been used successively in different acceptations. It is an expression which has been employed by turns to represent augmentation of animal heat—increase of heat with acceleration of the contractions of the heart—the latter phenomenon without increase of heat—a general disturbance of the functions without topical lesion—a salutary effort of Nature to cure disease, or to concoct the crude humours infecting the mass of animal fluids—a primary, and general modification of the economy, sometimes producing inflammations. An acceleration of the course of the blood, by means of a quickening of the contractions of the heart, with increase of calorification, and disturbance of the principal functions, &c."

"Fever, according to Galen,* are diseases that come on without inflammation, without abscess, without local pain, without erysipelas, without a special lesion of any part. 'If,' says this great physician, 'an inflammation of the side, or of the lungs produce fever, these diseases do not take the name of fever; they are called peripneumony, affection of the spleen, &c.' Celsus remarks, 'that two or three symptoms are not enough to characterize a morbid state. Heat, and increased frequency of pulsation in the veins are certainly the two principal characters of fever, but alone they do not constitute it, because many operations of the economy, such as fear, anger, &c. are capable of producing them.'"

M. Pinel differs but little from Galen. The word fever with him, implies increased heat, hurried circulation, disturbed functions, and the absence of local lesion. The definition given by Selle is still more vague :

"Fever is a disease variable in its course and its duration. There is cold, and heat, with the pulse sometimes more, sometimes less quick than natural. Cullen evidently follows Galen, when he defines fever as pyrexia without any primary local disease."

Thus we see, that by each succeeding definition of the word fever, the basis of a theory as to its nature and cause, nay even as to its treatment, is at once traced out.

Such being the vague and unsettled state of the notions connected with this word, we have deemed it necessary to declare, once for all, that when we may hereafter use the word fever, we would be understood to mean that state, in which we find heat of skin, quickened pulse, and deranged secretions without any reference whatever to the causes of these phenomena.

2. GENERAL CONSIDERATIONS.

There is no great difficulty in finding out to what sect our authors belong, from their readings of the great koran of physic, the works of Hippocrates. The learned Hakeem, in these, as in the book of his prophet, can find shadowed out the rudiments of all that man has ever yet discovered, as to human diseases and their cure, provided that he knows how to interpret the sacred text. In fact, there has been no view hitherto taken, either in pathology or therapeutics, of which we may not detect some traces, however obscure they may be, in the writings, authentic or apocryphal, attributed to the Father of Medicine. Thus the doctrines of the very latest and most popular living pyretologists, as to the local origin of fever, find considerable support in the recorded opinions of the Coan Sage. Take the following as an example.

"In angina, there is *fever*, pain in the head, swelling of the jaws."†

"In wounds of the brain, *fever* and bilious vomitings are the necessary consequences."‡

Hence it is argued by our authors, that, as in the times of Hippocrates, the knowledge of pathological anatomy and physiology was so very limit-

* Edit. Chart. Tom. ix. Aph. Hipp. Comment, pag. 184.

† Hipp. de Morbis, lib. ii.

‡ Hipp. de Morbis, lib. v.

ed, and as there were so few opportunities of connecting the symptoms during life, with the state of the organs after death, he was induced to attach to *fever*, as the chief morbid phenomenon of every acute disease, all the other symptoms that he had observed, and thus to make it a generic term, to designate all diseases accompanied by morbid heat, but to which he could not assign a local origin, as in the cases of angina and injuries of the brain, just quoted. For our own parts, we think that there is abundant evidence to show that the word *Πυρετός* was used by Hippocrates, on some occasions, to designate the febrile symptoms attending local inflammations which were palpable and visible to all, on other occasions, to designate the same symptoms more or less aggravated or complicated, but unaccompanied by any topical affection then cognizable. The leading groups of these symptoms, he naturally and properly divided into different types, distinguished by the modes and succession of their attacks; such as continued, intense fever—intermittent fever returning every day, every third day, &c. We think that our authors have established, in a most satisfactory manner, that the different epithets applied by Hippocrates to particular fevers, were only descriptive of symptoms accompanying that which, with him, constituted the principal phenomenon, namely, heat of skin, and not intended to designate distinct species of the same disease. Thus, fever, with the epithet *phricodes*, means febrile heat, preceded by shivering; with the epithet *lingodes*, morbid heat accompanied by hiccup; and so of the others.

We shall now endeavour to arrange under distinct heads, in a more concise manner than our authors have done, the different opinions that have hitherto been promulgated, as to the nature and cause of fever. We shall, of course, notice only the leading theories, those that appear to have given, during their respective reigns, a marked character and direction to the treatment of disease. It would be manifestly impossible to enumerate, in the space allotted to a review, all the minor opinions which physicians formed for themselves, from time to time, made up of parts selected from the greater systems, and combined according to their own views. The principal sects of pyretologists, whose theories as to the nature and proximate cause of fever, have swayed the science of medicine from its earliest records up to the present day, might, we think, be arranged under the following heads, viz. The Humorists—The Animists—The Solidists—The Essentialists—The Localists.

THE HUMORISTS.

The earliest, beyond all question, the most universally received, the most permanent in its duration, and we might, perhaps, add, the most practically useful in its application to the treatment of disease, is that theory which was born with the healing art itself, was methodized by Galen, and is

acted on by many up to the present day, we mean *the humoral doctrine*. The founder of the humoral, and, as it would seem, of many other doctrines also, was Hippocrates. He came to the conclusion, that all fevers are produced by a vitiation of the fluids. The vagueness and want of precision which we find in his writings on this subject, and his total silence as to the state of the pulse, are due to his entire ignorance of the mechanism of the circulation. He saw clearly, however, that the secreted fluids became depraved, some more palpably so than others, as soon as the fever was established. Hence his notions as to the agency of the *atrabilis*, &c. In short, with Hippocrates, health consisted in the existence of a perfect equilibrium in the material composition of the humours; disease in the destruction of this equilibrium; the healing art, in correcting the predominant morbid qualities of these humours.

Galen attempted to improve on these common-sense and simple notions, by attributing to each individual fluid the capability of producing a particular class of diseases; but he only succeeded in complicating them into something bordering on absurdity. The natural consequence of a theory, which supposes a separate morbid agency in each depraved fluid, was, the suggestion of distinct remedies, or purifiers, to be used as each humour became more prominently peccant, or as a particular humoral idiosyncrasy happened to prevail. Hence the almost countless multiplicity of Galenic medicines. Each fever had its distinct origin. Thus, quotidian fever was produced by the putrid pituita; tertian, by the yellow; and quartan, by the black bile.

These doctrines, after they had been lost in the dark ages, were again brought up by the Arabian physicians, but so mystified and complicated, as, for a time, to wear the appearance of novelty. They continued, however, to regulate the curative administrations of medicine, with the most uncontrolled sway, for many centuries.

THE ANIMISTS.

The first important schism from Galen's creed, was that of Paracelsus and Vonhelmont, the Mahomet and the Ali of physic. The former of these enthroned a demon, which he called *Archæus*, in the cardiac portion of the stomach, and, under his orders, he placed myriads of inferior *Archæi*, in the different organs of the body. All the functions were regulated by these, armed with their respective *ferments*. All diseases, and, consequently, fevers, were produced by the rebellious and improper use made by the minor *Archæi* of their respective ferments, and by the efforts of the great *Archæus* to bring them into subjection and order. Vonhelmont substituted, in his theory, the rational soul for all the *Archæi*, great and small. According to these theories, as each disease was looked upon as a battle, fought upon a regular plan, between the *Archæus* and the fer-

ments, or between the rational soul and the morbid matter, the physician had little more to do than to look on. To these extravagant notions we owe that famous work by Stahl, "*Ars Sanandi cum expectatione*." Hence the *médecine expectante* of the Essentialists of the late French school.

Although the archæus and the rational soul, (the *enormon* of Hippocrates and Plato revived) soon fell into disrepute, the notion, that fever is the result of a salutary effort of Nature to expel a ferment from the blood, was entertained by the great Sydenham himself, and is obscurely seen in the "*vis medicatrix*" of Cullen.

The medical theories of the Alchemists and their followers consisted in the belief of certain rude chemical actions going on amongst the fluids, and directed their efforts to the discovery of alexipharmacs, panaceas, and elixirs of longevity, to be substituted for the cumbrous farrago of Galenic simples.

The Mechanists, at the head of whom we may place Boerhaave, rejected with disdain the humoral doctrines, as far as the influence of the recremen- titious fluids was concerned. They retained, however, all that was good in the views and practice of Hippocrates, and pretended to direct their own upon principles purely mechanical and mathematical. The volume and form of the globules of the circulating fluids, as compared with the capacity of the vessels containing them, formed the basis of their theories as to the cause of disease.

THE SOLIDISTS.

Cullen may be placed at the head of these, for Hoffman was but half a Solidist. This school attributes all fevers to a spasm, or morbid contraction of the extreme capillaries. They moreover confine the term to acute diseases, unaccompanied by any primary local affection. The doubts which this theory involves, as to whether tone ought, in certain cases, to be given or taken away, naturally led to a vaccillating practice, producing little or no influence on the progress, or result of the disease. But a still more mischievous effect was produced by this doctrine. It arrested the progress of medical improvement by an artificial classification of diseases, entirely unsupported either by clinical observation, or pathological anatomy. John Hunter and his followers, when they use their favourite language, "the action of the vessels of a part," only mix up the solid parts of this theory with the immaterial vitalism of Stahl and Vonhelmont.

THE ESSENTIALISTS,

Or, more properly, the Ontologists of Broussais, having Pinel for their chief, finding that they could not maintain the independence of all fevers upon local inflammation, limited the number to five, which they called es-

sential, viz. inflammatory, bilious, mucous, adynamic, and ataxic fevers. They held that the entity, or being, of which they appear to know nothing, but which they call fever, produces, by a mechanism which they do not pretend to describe, all the symptoms and organic lesions which we witness during the progress of these diseases, or find after the death of those that perish by them. This, in fact, goes to assert that fever is fever, that it will have its fling in spite of all we can do, and leads once more to the practice of the *médecine expectante* and harmless ptisans. The bitter enmity, which our authors every where manifest towards the theories of M. Pinel, renders the following homage to his candour and integrity doubly valuable:—"A faithful interpreter of facts, even when in opposition to his theoretical principles, he attributes the ataxic fever to a morbid state of the brain. This was the first step in that road, which was afterwards destined to lead to a more important reform."

THE LOCALISTS.

The gradual improvement and diffusion of anatomical knowledge, the more accurate and more frequent observation of post-mortem appearances, in fact, the general spread of science, had been long preparing the basis of a much more important theory of fever than any that had been hitherto substituted for the doctrines of Hippocrates and Galen. The Localists, or those who hold that all fevers are caused by local disease, owe the materials of their theoretical edifice to the dissections made by Bertholin, Bonnetus, Morgagni, Baglivi, Chirac, Prost, the Hunters, Bichat, and a host of others. The traces of inflammation or congestion, almost always found about the encephalon and abdominal viscera of those that perish from fever, very early induced different pathological anatomists to consider one or other of the varieties of these local affections as the proximate cause of fever. Chirac conceived that fever is owing to inflammation of the brain. Baglivi says, that the fevers called malignant are produced by phlegmon, or erysipelas of the intestines. M. Broussais, however, appears to have been the first who digested the facts collected up to his day, as to local irritations and inflammations, particularly those of the stomach and bowels, into a regular code of doctrinal pathology. Our authors, zealous supporters of his doctrine in all its ramifications, thus introduce this celebrated pyretologist to our notice.

"Penetrated by the sublime views of Bichat as to the sympathies, rich in numerous facts observed with a rare sagacity, M. Broussais came to overturn, from the very foundation, the antique edifice of fevers. In his works, as well as in his lectures, he has applied himself, for many years, to demonstrate, that the fevers which had been called essential, were nothing more than local diseases, inflammations, nay, even *gastro-enterites*. The following propositions (say our authors) may be looked upon as the summary expression of his doctrines.

"1mo. Fever, considered in a general and abstract manner, is never other than

the result of a primitive or sympathetic irritation of the heart, through the effect of which this viscus hurries its contractions.

" 2do. Every irritation, sufficiently intense to produce fever, is an inflammation.

" 3tio. All the fevers of authors are connected with gastro-enteritis, simple or complicated. This they have all overlooked when unaccompanied by local pain, and even when accompanied by pain, they consider it as an accident. Authors have sometimes said, that certain fevers depended on inflammation of the digestive organs, but they have never said that these fevers, the pretended essential fevers, cannot have any other cause; never that they were produced by the same mechanism as the fever of peripneumony; never, in short, that there are no essential fevers.

" 4to. It is by gastro-enteritis that small-pox begins; by gastro-enteritis and an acute ocular, nasal, guttural, or bronchial catarrh, that measles and scarlatina commence.

" 5to. Intermittent and remittent fevers are periodical *gastro-enterites*, but the encephalon and other viscera are irritated sympathetically, as in continued fevers, and may also become the principal seat of irritation, and put on inflammation in an acute or periodic manner.

" 6to. The fevers termed pernicious, differ from other fevers, only by the violence and danger of congestions."

M. Broussais holds that these propositions are proved by the following facts; we give his own words.

" 1mo. All the causes of fevers act locally; they all irritate the gastric mucous membrane, that point of the organism on which the action of every morbid cause strikes.

" 2do. In almost all fevers there are unequivocal local symptoms of irritation of the stomach and small intestines, a fact that does not allow us to overlook the existence of gastro-enteritis.

" 3tio. The sympathetic symptoms, in the absence of symptoms of gastric irritation, demonstrate evidently, though indirectly, the existence of gastro-enteritis in all fevers.

" 4to. A great number of organs do not participate in a morbid state in fevers, and of those that do, some are more, some less affected by it.

" 5to. The adynamic and ataxic symptoms are due to irritation.

" 6to. After death we always find traces of gastro-enteritis."

The above assertions constitute the doctrinal code of the Broussaists, certainly the most important medical sect of the present day.

The curative administrations in all fevers, practised and inculcated by this, as by all other sects, are the legitimate offspring of their theory, as to the proximate cause of the disease.

We do not mean to notice here, the minor varieties of Localists of our own country, (schismatics from this parent stock,) neither those who found their innocent little heresies on particular symptoms and traces of organic lesion, not very frequently present; nor those, whose vague notions as to topical congestions, have led to destructive, and perhaps, erroneous practice.

We pass over in silence the individual examination of M. Pinel's five essential fevers, and the arguments adduced to prove, that they are but so many examples of gastro-enteritis. Indeed, our authors can see nothing but their favourite "*gastro-enterite*" in the putrid fevers of Pringle, the typhoid epidemics, described by Fracastorius, Tissot, Roederer, &c.; nay,

the very intestinal worms, often found after death, are, according to M. Broussais, produced by *gastro-enterite*.

Severe and peremptory as the Animists were in their condemnation of the doctrines of their predecessors, the Humorists—the Solidists in their enmity towards the Animists; we shall find that the Localists are equally, if not more determined in their condemnation of their immediate masters and rivals, the Essentialists. The following ultimate, and sweeping conclusion, to which our authors arrive, respecting the theories of the Pinel-school, will, we think, justify this assertion.

“We conclude from the researches which we have made preparatory to writing this article, and from the facts which we have accumulated in its different paragraphs,—that the general descriptions of inflammatory, bilious, mucous, adynamic, and ataxic fevers, arising from an attempt to reconcile facts dissimilar, or as yet undetermined, being inexact, arbitrary, and false, ought never hereafter to be reproduced in works of pathology.”

As the size and expense of the work, from which we have selected the present article for review, must render it inaccessible to many of our readers, we have taken much pains to offer a concentrated view of the different theories, in the examination of which, our authors have given proofs of great research and critical acumen. We have been more particular in our notice of the doctrines of M. Broussais, because they exercise, at present, a paramount influence on the whole medical practice of the Continent; and, because they are rapidly gaining ground in this country. Theories are important, not so much from the reality and consistency, or utter groundlessness of the facts, upon which they appear to repose; as from the decided bent they have at all times given, when adopted generally, to the measures by which we endeavour to prevent, or modify disease. We have followed our authors in their theoretical research, in order that we might arrive, with minds better prepared than they otherwise could have been, to the discussion of the practical parts of our subject, the anatomical characters, the symptoms, and treatment of these inflammations, which, by some, are thought to cause, or constitute fever; by others, to be but secondary effects of a more general cause. Be this, however, as it may, it is not the less true, that if we can remove the phlegmasiæ, or congestions alluded to, we shall very rarely fail in curing the general functional disorder, by which they are always accompanied.

GASTRITE, GASTRO-ENTERITE, &c.

As the admiration which our authors, (particularly M. Rayer,) every where express, for the doctrines and practice of M. Broussais, appears to us to border, rather too closely, on enthusiasm, we have deemed it prudent

to take in a little practical ballast from M. Chomel, on the subject of *gastritis*, before we approach the stormy ocean of *gastro-enterite*.

"Gastritis, or inflammation of the stomach," says this enlightened physician and laborious observer, "is one of those affections, which, for some years past, have particularly engaged the attention of medical men, and given rise to a great number of works, for the most part polemic. If discussions were of a nature to throw much light on the history of disease, our knowledge of the one in question would have made rapid progress. But the experience of ages has proved, that the sciences of observation march with facts; and that scholastic disputes have seldom profited them much. Instead of collecting with care, and without any other intention than that of coming at the truth, numerous examples of this disease, the greater number of physicians have devoted themselves to theoretic discussions, have almost entirely neglected to collect facts, or have viewed them only through the dangerous prism of prejudice. What has been the result? Inflammation of the stomach, embarrassed by an almost infinite number of useless writings, obscured by inexact, or truncated observations, is at this moment, one of the phlegmasiæ, of the symptoms and anatomical characters of which, we have but an imperfect knowledge. This assertion may appear false, to some, but will not surprise those who have carefully watched the sick, and opened many bodies. In fact, if on the one hand, it is often impossible during life, to determine with certainty, what the state of the stomach will be after death; and if, on the other hand, the anatomical examination of this viscus is not generally sufficient to determine with precision, whether there were, or were not symptoms of gastric inflammation during life; are we not compelled to acknowledge, that this phlegmasia is one of those, our knowledge of which, is as yet but very imperfect. The number, and the discrepancy of the writings, of which this disease has been the subject for many years, would be almost enough to demonstrate this assertion.

"We do not, however," continues M. Chomel, "pretend to say, that gastritis is at all times, and in all its degrees, an obscure affection; we shall see on the contrary, that in many of its forms, it is marked by symptoms as defined as those of pleurisy and pneumonia."

GASTRO-ENTERITE.

We pass over the remainder of M. Chomel's excellent monograph on gastritis, for the purpose of entering at once upon the legitimate domain of M. Broussais.

Nothing can be more lucid than the order, nothing, in our opinion, better judged, than the method, observed by M. Rayer, in his distribution of the heads, or points of view, under which he has treated this celebrated disease, or rather this *panto-pathological* essence of all diseases. The whole article is a perfect model of what a medical monograph ought to be. There is neither the laboured verbiage of speculative theory, nor the fatiguing minuteness of narrow observation. There is enough, however, from which to stock the mind with the most useful parts of what is known on this interesting subject, and enough to stimulate it to further inquiry. In short, we conceive it to be the very best, and most practically useful essay, that we have as yet seen to emanate from the school of Broussais.

The following paragraph contains some statistical details curiously indicative of the influence of medical theories.

"Gastro-enteritis—a name proposed by M. Broussais, to designate the simultaneous or successive inflammation of the stomach and small intestines, is, of all the phlegmasiæ the most frequent, and, at the same time, that which has been oftenest overlooked or mistaken. You will not find it indicated in any nosological table. Gastritis itself was not long ago pretty generally looked upon as a very rare disease; for of twenty-eight thousand, two hundred, and ninety-nine sick admitted into the civil hospitals of Paris, in 1807, *six only* were designated in the definitive returns, as labouring under inflammation of the stomach, whilst six thousand, one hundred and forty-three, were treated for continued or remittent fevers. Such a result cannot be comprehended, except by admitting that, according to Brown's principles, the name gastritis was only given to inflammations of the stomach, produced by poisons; or, perhaps it may be better to suppose with Hufeland, and many French physicians, that, in consequence of some occult changes having taken place in the constitution of the atmosphere, the bilious, mucous, and adynamic fevers have been supplanted in these latter times, by gastro-intestinal phlegmasiæ, the frequent appearance of which is now no longer disputed."

M. Rayer, after showing that the specific and separate denominations, *gastritis* and *enteritis*, have been often vaguely applied by nosologists, in their artificial arrangements, to the simultaneous, or immediately successive inflammations of the stomach and small intestines, observes—

"That as by far the best authenticated part of the history of the phlegmasiæ of the digestive organs are the changes they undergo, it must be by these changes that their inflammations can be best characterised and specified." "I am (says our author) certain, that I shall be able to render more intelligible the variety of phenomena produced by these inflammations, by beginning the description of gastro-enteritis with the alterations that constitute it."

Previously to a separate enumeration of the various alterations occurring in gastro-enteritis, our author makes the general remark, that—

"All the forms, and all the terminations of acute and chronic inflammation, observable on the external teguments, or on the different points of the gastro-pulmonary mucous membrane, may take place in the stomach and small intestines, but with unequal frequency. These gastro-enteritic phlegmasiæ, noticed by Morgagni, Prost, &c. and very recently pointed out by M. Broussais, have furnished materials to Andral, Bichat, and Louis, for novel and important observations."

According to his proposed plan, M. Rayer commences with the organic alterations, (of which he describes twenty-one,) that have been found in the stomach and bowels of those who are supposed to have died whilst labouring under gastro-enteritis. The changes that occur in the colour of the mucous membrane are first considered.

Accidental red tints, which he compares with cutaneous exanthems, are said to be the most constant of all the effects of this phlegmasia. They appear either under the form of *vascular arborescence*, or of circumscribed patches, varying from the most intense red to the deepest brown. Sometimes there are a number of little red spots, like the marks in purpura, occasioned by minute but separate submucous hæmorrhages.

All these changes of colour are most frequently found at the bottom, and

great curvature of the stomach and on the intestinal valvules. An universal deep violet tint of the mucous membrane, black ecchymosed spots, and sometimes effusions of blood into the cavity of the stomach, may, we are assured by Morgagni, be produced by the course of the blood in the vena portæ being obstructed. The slate-coloured grey, the greenish-grey shades, which M. Broussais has sometimes remarked, affecting the gastro-intestinal mucous membrane, he considers as products of inflammation; nay, the morbid dead-white paleness of the coats of the stomach and small intestines, noticed by Bonetus, but more particularly remarked by M. Guersent, as frequently found in children, is set down to the account of inflammation by our author; as also the softening, to the consistence almost of boiled starch, described by this writer.

Here we would take the liberty of remarking, that if every shade of colour, from the darkest red to the deadliest white, may give proof of inflammation having existed in the tissue where they are found, we would say, "*nimum ne crede colori.*" The necessity of this caution we have seen frequently exemplified by that accurate pathologist Laennec. In his post-mortem examinations, he would order a portion of a healthy artery, say of the aorta, to be detached, and filled with the gore of the subject. At his next clinical lecture he would order this preparation to be exhibited, when the lining member of the artery was always found stained or dyed a lively red, such as could not at the moment be either rubbed or washed off.

Softening (ramollissement) of the stomach and small intestines; "very rare (says our author) in the fœtus and the old—frequent in new-born infants and at the period of weaning—often observed in adults, more particularly in lying-in women. This disease attacks indifferently both sexes." By John Hunter it was attributed to the solvent action of the gastric juice; but is now pretty generally allowed to be the result of inflammation. This view seems to be confirmed by the pustules and figured inflammatory patches that generally co-exist with this singular affection, and by the success of antiphlogistic means in its treatment.

"This disease (says M. Chomel) is always accompanied by acute pain in the stomach. To this organ the patient refers all his sufferings. Can we then, hereafter, assert, that the mucous membrane of the stomach is insensible? that it expresses its sufferings only by sympathetic phenomena? Is it not, on the contrary, evident, that it obeys the common law, and indicates its lesions, like other organs, by pain, and the disorder of its functions?"

We would strongly recommend to our readers the recent work of M. Louis on this very interesting subject.

Ulcerations—a frequent termination of inflammation in most parts of the body, and certainly the most unequivocal testimony, that the tissues in which we find it after death had been inflamed during life. The greater frequency of ulcerations in the lower portion of the ileum is attributable to the greater frequency of pustulous inflammation in that part of the

intestine, and not, as has been asserted by some writers, to the greater abundance of mucous follicles. "The duodenum, so plentifully furnished with follicles, is, of all parts of the small intestines, the least liable to ulceration."

Gangrene is an exceedingly rare termination of gastro-enteritic inflammation, notwithstanding M. Broussais' assertion, that he had often observed it. Our limits will not allow us to do more than merely to enumerate the other alterations which pathological anatomy is said to have found in this disease. These are, thinning of the parietes of the intestinal canal—thickening of ditto—diminution, or augmentation of caliber—pustules—vesicles—papules—membraniform exudations—cream-like exudations—inflammation of the submucous cellular tissue—emphysema—œdema—perforations—vegetations—schirrous and medullary matter—tubercles, &c.

The first stage of gastro-enteritis consists in a mere sanguineous injection of the mucous membrane. The second in any of the various morbid exudations—the third in ulcerations—the fourth in thickening, or thinning of the coats, and the formation of accidental tissues. The fifth, in gangrene or destruction of the parietes themselves. As the first, second, third, and fifth stages may be developed within the first four days, they are said to belong to acute gastro-enteritis. The fourth stage, or deep and permanent alterations of texture, belongs exclusively to chronic gastro-enteritis.

Acute Gastro-enteritis. All ages and sexes, from the foetus in utero to the centenarian, are liable to this disease; and every thing that can be introduced into the stomach, from the viands of the alderman's feast to the most acrid poison, from tonic draughts and emetics to knives swallowed whole, may produce it. Starving itself, a principal remedy for this disease, when carried to excess, gives rise, according to J. Hunter, Dumas, and Magendie, to inflammation, and even ulceration of the stomach.

"But of all the causes of this malady, the inflammation of other organs is the most remarkable, and certainly the least noticed. Dupuytren, Abernethy, and Broussais have successively pointed out the influence of large burns, inflamed wounds, &c. in exciting gastro-enteritic inflammation."

Symptoms. Of the four local phenomena usually assigned to inflammation, viz. pain, heat, redness, and swelling, only the first two are appreciable during life in this disease; and they are both generally in proportion to the intensity of the inflammation, except when complicated with cerebral affections, and then they are never so sensibly felt. Pressure on the region of the epigastrium seldom, or never fails to cause pain, when gastro-enteritis is present, but we should take care in applying it, not to mistake what may be the effect of our own exertion, or the patient's natural sensibility, for the morbid tenderness of an inflamed organ. This particular phlegmasia we may say, is never found uncombined with other important

derangements, as has been satisfactorily proved by the dissection-returns drawn up at the Hôtel Dieu, by order of M. Dupuytren.

According to the school of Broussais, it is to the various combinations, or groupings of the symptoms attendant upon this disease, in its different stages and complications, that we owe the countless variety of fevers described by authors.* We cannot help acknowledging that there is much truth in this observation. When the constitutional symptoms common to all inflammations were present, with a white tongue and viscid saliva, 'twas the mucous fever, with a yellow tongue, the bilious, with a black, the putrid fever. When there was tenderness of the abdomen, with much debility, it was the adynamic fever. When the gastro-enteritic inflammation was complicated with cerebral symptoms, it was the ataxic; with thoracic symptoms, it was the mucous catarrhal fever, or the pneumonia notha.

If it be true, and we believe it is as good as proved, that all the symptoms known to accompany European fevers at least, also accompany the disease we are treating of, in its acute form—if it be true that in nine-tenths of these fevers there are evident signs of gastro-enteritic inflammation during life, and that unequivocal traces of its having existed are found after death—if it be true, that this connexion of fever with the phlogosed state of the digestive organs was not efficiently noticed before the time of Broussais, then must it be also true, that this pathologist has conferred an incalculable benefit on the healing art, by calling the attention of those that exercise it, to this important, and hitherto unknown coincidence.

It has been proved beyond all contradiction, by the most ample statistic records of post mortem examinations at the Hôtel Dieu—by the experiments of Orfila, by Abernethy, and many other authorities, that large inflamed wounds, burns on the trunk or extremities and poisons applied to the surface, produce inflammation of the gastro-intestinal membrane, of the thoracic viscera, of the encephalon. The successive effects of this transition of inflammation, whether it be by sympathy, irritation, or absorption, from the surface to the centre are, an arrest, or alteration of chyfication, depraved secretions, tenderness of the epigastrium, nausea, quickened circulation, heat, loss of appetite, emaciation, and all the complicated derangement of function, that extensive organic lesion never fails to bring with it. From these symptoms, as they may be variously combined in different subjects, under different circumstances, the closet-nosologist, or speculative essentialist, can compose any variety of fever, and establish an ideal species according as he finds mucus, bile, debility, or delirium, prevail. But practical anatomy acknowledges only one disease, made up of certain phenomena consecutive upon a burn, a wound, or a capital operation.

* Sauvages gives 150 varieties of fever.

Treatment. In these cases, at least, there is a cause of fever anterior to gastro-enteritis. Broussais says that it is an irritation; but in his second proposition he states, that "every irritation that produces fever is an inflammation." See the effect of this theoretical hitch upon his practice. He applies leeches in every variety of fever, in all its stages, nay almost in every disease, to the region of the stomach, the thorax, the head, the extremities; pursuing the sympathetic irritation, or inflammation of *gastro-enterite* through all these different localities; and this, to the almost total exclusion of every other remedial measure, except the most rigid starvation, which he calls "diète absolue."

The above comprises the whole treatment of acute *gastro-enterite*, and consequently of every variety of continued fever. The expulsion of foreign bodies from the stomach and bowels, the recalling local inflammations that may have suddenly disappeared, or the subduing those that appear to keep up the disease by sympathy, can scarcely constitute an exception.* In the following paragraph on prophylactic treatment, M. Rayer offers some good, though perhaps not very palatable advice to old gentlemen, and bold practitioners.

"This disease will become more rare in old men, when they shall have given up their elixirs of longevity, their stomachic tinctures and pills—their precautionary purgatives. It will become less frequent with all classes of society, when physicians, more reserved in the employment of potent medicines, shall have begun to count a little less on the tolerance of the stomach."

Emetics, purges, (amongst the rest, calomel,) nay, even bark, are all formally denounced. Nothing, as we said before, is left with which to combat disease, by this exclusive theory of localism, but leeches and starving. This dangerously simplified practice is not the result of, though its utility is said to be confirmed by, experience. It is the direct consequence of the third article of the Broussais-creed, as already quoted, viz: "that all fevers are connected with, and referable to, gastro-enteritis."

CONTRAST OF LOCALISM WITH HUMORISM.

How much more natural, how much more consistent with the facts, of which we are best assured in pathology and therapeutics, is the notion, that some change must take place in the circulating fluids before fever can be developed? The practice that results from this theory rejects none of the *juvantia*, overlooks none of the *lædientia*. It leaves their management where it ought to be left, to the practised judgment of the competent physician. All that we have hitherto learnt by the study of symptoms and signs; all that we have been taught by the mechanical analysis after death,

* A costive state of the bowels persisting, without any alvine discharge during five or even ten days, is looked upon as a good symptom, and is not interfered with by M. Broussais.

of the organs that appeared to suffer during life, confirm the justness of this notion, and contribute to its development. Do we not observe the fluids become depraved as the constitution becomes more generally, and more intensely involved in fever? Do we not see all the organs resume their healthy functions, as the blood throws off by sweat, by hæmorrhage, by urine, or by stool, something, which a moment before formed a part of its own stream? But the very source of that stream is in the stomach and bowels. The principle that regulates the proportion, the quality, the relative position of its molecules, is the nervous energy. That which affords due excitement to this regulating power, is the healthy blood. No man will pretend to say, that there can be fever when all the fluids are in their healthy condition, because, on the one hand, there is due nourishment of the nervous mass, on the other, due distribution of its influence. But as the paramount laws of matter, generally, cannot be sacrificed to individual preservation, the very organs, whose office it is to prepare and convey the materials of health to the different parts of the animal machine, must, from their very structure, take up and prepare poisons under certain circumstances, or produce by their influence, when morbidly excited, deleterious changes of combination.

Every thing then that we do in disease, ought to tend towards re-establishing the purity of the fluids when it has been disturbed. The practice of the Father of Physic was founded upon this principle. He purged upwards and downwards, to clean and prepare the digestive organs, when they appeared to suffer from foulness. He produced direct diminution of the circulating fluids by bleeding. He administered demulcents, refrigerants, corroborants. He attended to diet, and encouraged critical discharges. But above all, he distinguished the cases and the stages of disease, in which the adoption of these respective plans of treatment might be advisable. He practised an art that required the highest powers of the mind for its successful exercise. The Broussaists, on the contrary, like the Brownists, have reduced the whole science to one or two unbending maxims, which they call physiological, to be learnt in an hour, and practised without distinction; viz: that all fevers consist in *gastro-enteritis*, and their cure in local bleeding and starving. These remedies, excellent on some occasions, we have seen carried to such indiscriminate, and destructive lengths, by M. Broussais himself, that the subjects of them perished, perfect bloodless skeletons; and, instead of showing signs of an inflammation requiring such rigor, the whole alimentary canal resembled the finest oiled paper, in paleness and transparency; exhibiting perhaps, a few arborescent patches of red, at the most declining and sharp folds of the small intestines.

There is yet another disadvantage in this doctrine, besides those already noticed. Its views do not extend beyond the limits of anatomy, and this has been lately brought to a pitch of advancement, beyond which we

cannot hope to see it carried, without drawing largely on the imagination. This doctrine does not direct our research towards that other great opening that leads to chemical pathology; a source from which, we venture to predict, the next great light will illuminate our science. This is an almost uncultivated field, and in the present state of our knowledge, holds out the most brilliant hopes to the zealous and qualified labourer. We should rejoice to see such men as Prout and Orfila, enter with energy upon the track of organic chemistry.

Broussais, his followers, and his opponents, have done much good. To their controversies we owe the rapid progress that has been made in the pathological anatomy of the hollow viscera—the prudent caution now observed, even in this country, in the use of drastic purges and emetics. But from Broussais alone, we have learned the full value of that symptom, so important in fever, the sensibility of the epigastrium to external pressure. It is by applying to the etiology of this, and its subordinate functional derangements, the lights of morbid anatomy, that we are sometimes enabled to guide our practice in the commencement of fevers, so as, by prudent depletory, evacuant, and dietetic measures, to shorten their course, and mitigate, or prevent their worst symptoms.

The pathology and treatment of chronic gastro-enteritis, as understood by M. Rayer, do not come within our plan. They are not necessarily connected with fever. We, therefore, pass them over, as well as the heads, *intermittent*, and *epidemic gastro-enteritis*, because they would lead too far into polemic theory, and because the reader is referred to other articles of the dictionary, such as *fièvres intermittentes*, *typhus*, &c. The very titles, however, with what we have already said, will afford a tolerably correct notion of the almost unlimited extent, to which Broussais and his disciples apply their pathological pass-word. We must, however, add, that those who neglect to make themselves acquainted with the morbid alterations, the symptoms, and the principles generally, upon which the doctrines of this school are founded, want, in our opinion, a large portion of that knowledge, which a good physician of the present day, ought to possess.

We shall close this article with the concluding words of M. Rayer.

"The alterations of the stomach and intestines are so varied, and so few comparative therapeutic experiments, have been, as yet, made under well determined circumstances, that it would be difficult to ascertain, even approximately, the sum of the cures which it is permitted to hope for from the antiphlogistic plan, as compared with the more active measures, such as moxas, blisters, setons, &c. In fine, if in the present day, we see but few practitioners administering medicines for the cure of *particular symptoms*, as was, heretofore, the case—if physicians no longer blindly combat *pains in the stomach* with narcotics—*dyspepsia* with bitters, elixirs, mineral-waters, &c.—*sour regurgitations* and *belchings* with absorbents—*vomitings* by anti-emetic potions—*constipation* by calomel—*diarrhea* by astringents, it is because, since the splendid researches of Pujol, and of Broussais, it is generally acknowledged, that the inflammatory alterations which produce these different symptoms, ought alone to form the source of curative indication."

2. *A practical Treatise on the Typhus or Adynamic Fever.* By JOHN BURNE, M. D. &c. &c.

WE had already closed the *Dictionnaire*, and were about to say, in the shape of a postscript, that, though our French *confreres* might have written the article on *typhus* to which they refer, we should be compelled to put off the consideration of it to a future opportunity, the editors not having yet given it to the world. Under these circumstances, nothing could be more *à propos* than the appearance of Dr. Burne's book. Instead, therefore, of waiting for our neighbours' monograph, which, in all probability, is still in the bosom of fate, we shall endeavour to give our readers a brief sketch of the opinions and practice advocated by the ingenious author of the work before us.

Dr. Burne divides all continued fevers into two species—*inflammatory* and *adynamic*. The basis of this division is the presence, or the absence, of "depression of the nervous energy." Both these species may, or may not, be accompanied by local inflammations. They are both, however, thus robbed of every thing like anatomical characters. The word *adynamic* defines itself. In fact it may be said to be attended by a "*non possum*," in its fullest acceptation. The principal symptoms of "four degrees" of this fever are given, and, strange to say, the stomach is not once alluded to in their description; nor is the state of this organ once mentioned in the account of post-mortem appearances.

Pinel, who gave to this disease "a habitation and a name," but whom our author does not notice, divides typhus into *two stages*,* (and we think he is borne out by nature) viz. the inflammatory and the nervous. Amongst the symptoms of the first stage, are "*nausea and vomiting*"—in the second stage, "pains when the belly is touched, owing to an *inflamed state of the intestines*, which is never entirely wanting, for traces of it are *always found in the dead body*."

"*Seat and Nature of Adynamic Fever—Primary Cause.*" In reply to the questions suggested by these headings, our author (at p. 161) comes to the following conclusions, after having commented rather sharply on some of the modern theories.

"1mo. That the adynamic fever has no local seat.

"2do. That its nature is a morbid condition of the blood, produced by the operation of the primary cause, the respiration of a contaminated or poisoned atmosphere.

"3tio. That this blood, acting on the brain and nervous system, is of itself sufficient, in very many instances, to bring about the deranged functions that constitute the phenomena of the adynamic fever.

After what we have already said in our strictures on the doctrines of M. Broussais, we need not add any further comments on the views which these most important propositions lead to. Suffice it to say, for the present, that,

* Nosograph. Philosoph. tom. i. p. 148, 6me edit.

if Dr. Burne's proposition stood thus, we should immediately subscribe to it. *That a morbid condition of the blood, however produced, is sufficient, in all instances, to account for the phenomena of fever.*

Organic chemistry being likely, ere long, to excite the attention of pathologists in no ordinary degree, we think it right to mention here, that, according to our author, (p. 142) "blood drawn while the adynamic fever is urgent, is surcharged with carbon." According to Dr. Clanny, of Sunderland, there is no "free carbonic acid" in typhous blood. The latter grounds his opinion on his own experiments.

"*Pathology of the Adynamic Fever.*" Under this head, in Chap. VII. come the "morbid appearances," which the great Lænnec would have called the anatomical characters, and placed in Chap. I. We strongly recommend to our readers, the remarks of the author upon the effects of opening the thorax and great vessels of the heart, before the head is examined, and vice verâ, on the appearance of the vessels of the brain, and the entrance of air into them.

The inflammatory alterations found in the intestines, as well as tympanitis, when it occurs, are considered as the direct results of the congestion of fæcal matter, and "putrid decomposed intestinal secretions lying in the most depending portions of the canal," and are said to be "an effect, not a cause, of fever." The only proofs, however, brought forward, that the phlogosis of the mucous membrane is a secondary, and not a primary affection in typhus, are the cases of those who, during the progress of their disease, showed no symptoms of enteritis, until the fever was fully formed, and who ultimately recovered.

"*Treatment—Blood-letting.*" It is in these cases," says our author, "in which the adynamic fever is quickly developed, that its course may be frequently shortened by the abstraction of blood: but it must not be supposed that blood-letting will *always* cut short an adynamic fever, as it does an inflammation, as a pneumonia. No such thing."

In this remark we entirely agree.

As every practical writer recommends a favorite remedy, so Dr. Burne is loud in his praises of *mercurial inunction*, though he condemns calomel and blue pill, as "*gripping, irritating,*" &c.

"Mercurial friction of half a drachm of the unguent, hyd. fort. twice a day, has produced more rapid and favorable changes, in very severe cases of adynamic fever, than any other remedy I have ever seen administered."

As to the *quomodo* and the *quando*, it may be rubbed on any part of the body.

"When the brain is much affected, when there is inflammatory action going on—and, indeed, in all cases, and at all times, when the return of the secretions is obstinately protracted."

We have seen this remedy extensively employed in epidemic fever, of a typhoid character, and we thought with advantage, but we have also seen it produce unequivocal mischief, as the very best remedies will do, when

pushed to imprudent lengths by men, who are ambitious of the character of bold practitioners.

The reader will find recommended in Dr. Burne's book a well-timed use of aperients and enemata, an attentive observation of the colour and quality of the discharges—a strict attention to diet—a meeting of indications as they arise, not upon any insulated or empirical principles, but upon the broad basis of the views that he has taken of the nature and seat of the disease. In short, we consider this book as affording a good example of the superior prudence and efficiency of "a mixed treatment," guided by observation, and based upon a rational humoral pathology, as compared with the generalizing compendious practice of intolerant localists. The work before us, though a very useful addition, as it stands, to our stock of practical knowledge on the subject of typhus, would be at least a more agreeable one, if its pages were occasionally relieved by a little shading from either ancient, modern, or cotemporary authorities. Had Dr. B. not disdained to read, or, having read, to quote, he would not have omitted to notice the eruptive disease* peculiar to the adynamic patient, between the second and the seventh day—the anatomical characters of *petechiæ* as differing from the typhoid exanthem†—the tendency to various kinds of natural crisis, &c. We conceive it to be our duty to deprecate this autocratic, exclusive plan of writing upon a subject, which has been so ably investigated by so many great men—this setting us down to a solitary meal, however nutritious, when so many instructive guests might have been invited to meet us. If an author be either too lazy, or too proud, to strengthen his own conclusions, by an opposition to, or a comparison with, those of others; his readers will try to invalidate them by this very process, and will often succeed. To him who reads, all written authorities are of equal weight, except where the author is personally known. Notwithstanding these errors of omission, we can safely recommend Dr. Burne's book to the favourable notice of such of our readers, as may be disposed to take a plain, common sense, useful view of continued fever.

The late period at which Dr. Burne's work appeared (after the construction of this article)—the hurried glance which we have been obliged to take of it—and other considerations unnecessary to be stated—leave us the option (and we shall shortly have the opportunity) of again reverting to certain doctrines and opinions in the publication, when noticing the section on fever in Dr. Bright's work, of which one more analytical article yet remains for insertion in the course of the present number.

II.

On Functional Affections of the Heart and Arteries. M. LAENNEC.

In our last number we noticed the subject of neuralgia of the heart, and also angina pectoris. We shall now advert to some other nervous affections of this organ.

PALPITATION.

Every beating of the heart which is sensible and unpleasant to the individual, and, at the same time, more frequent than natural, is termed palpita-

* Vide Thucydides, Raikem, and Bianchi, Boin, Pinel, &c.

† Rouchoux.

tion. The pulsation is often audible by the patient, and even by the bystander. If a person lies in a horizontal posture, during palpitation of the heart, he will hear, in that ear which is next the pillow, a pulsation double in number to that at the wrist. This arises from his hearing the alternate contractions of the auricles and ventricles. In many cases there is only an increase of frequency in the actions of the heart, while the patient imagines, from his sensations, that there is also great increase of force. Laennec has known this kind of palpitation go on for eight days, the pulse remaining extremely small and weak, and from 160 to 180 in the minute. In healthy persons, and from the excitement of moral or physical causes, there will be an increase both of force and frequency in the heart's action. As the sound and sphere of the heart's pulsations are much increased during palpitation, we should never draw any conclusions from auscultation at such times. We must wait till the heart is in its usual rate of going.

But to speak of purely nervous palpitation, unaccompanied by any organic change in the heart, it may be observed that this kind is often much more troublesome and distressing to the individual than that which is dangerous from its cause. Far from being removed by the most complete repose, it is, in general, most distressing during the early part of the night. It often prevents sleep—and it is often removed, or at least mitigated by moderate exercise. There is no complaint which is more liable to lead medical men, especially young practitioners, astray, than palpitation of the heart. The following passage from Laennec is in perfect accordance with our own observations.

“The purely nervous palpitations consist in an increase of the impulse, sound, and particularly of the frequency of the heart's pulsations. A feeling of internal agitation, particularly in the head and abdomen, always accompanies them; also a limpid watery condition of the urine. The duration of palpitations of this kind is very variable: they may be momentarily excited by mental emotion; while, at other times, they seem to originate without any obvious cause, and continue for several years, especially in young persons who are at the same time both nervous and plethoric.—It is commonly imagined that such an habitual over-action of the heart as such palpitations imply, must at length give rise to hypertrophy of this organ. This is possible; but I must say that I have never seen any proof of the accuracy of this opinion. On the other hand, I am acquainted with individuals who have been habitually subject to affections of this kind, and who nevertheless exhibit no positive sign either of hypertrophy or dilatation.”

The physical signs (as revealed by examination with the ear) which distinguish nervous palpitation from that dependent on organic disease, are thus characterised by Laennec.

“In nervous palpitation, the first impression conveyed by the stethoscope is that the heart is not enlarged. The sound, though clear, is not heard loudly over a great extent of chest; and the impulse, although appearing considerable at first, is really not great, as it never sensibly elevates the head of the observer. This last sign seems to me the most important and certain of any, when taken in conjunction with the frequency of the pulsations. These are always quicker than natural,—being, most frequently, from eighty-four to ninety-six in the minute. Nervous palpitations are rarely accompanied by any sign of determination of blood to the head or chest, except in old persons.”

Palpitation of the heart is often increased by the very means which are taken to subdue it. Dr. Parry made it fashionable to attribute all nervous diseases to increased fulness or impetus of the blood-vessels, and therefore the lancet was freely used in palpitations. There can be no doubt that there are many sedentary females who eat a great deal too much, and walk a great deal too little, and who, consequently, have a plenitude of the vascular system, and a preter-natural mobility of nerve. These, when affect-

ed with palpitation, are benefited by blood-letting, abstinence, and even purgation. But, in most other subjects, and especially in hypochondriacal and hysterical individuals, the depletory practice increases the palpitation. The complaint is, in fact, extremely indomitable, and it is a great object to be able to say that it is nervous palpitation, and unaccompanied by danger. When a patient is thoroughly satisfied on this point, he or she will be less anxious about a cure, and more easily reconciled to the presence of an uncomfortable companion. There are, however, some means which occasionally relieve or remove this complaint. As this affection seldom exists, without some cause which can be traced, by accurate investigation, to errors in regimen, mental distress, or derangement of some corporeal function, so this inquiry should never be omitted. At all events, there can be no safer or more effectual plan of treatment than that which is based on temperance, regularity, and the improvement of any deranged function. Failing in these efforts, we may prescribe a steady system of exercise—the shower-bath—and certain *sedatives*, in which we have so great faith. The mobility of the nervous system is best reduced by that which gives natural tone and strength to the whole system. Plain food regular exercise, and early hours, will do more than all the assafoetida, bark, and valerian, in Apothecaries' Hall.

IRREGULARITIES OF ACTION.

These may exist without palpitation. Irregularity of this kind is often met with in elderly people, without any disturbance of the general health. Sometimes, amid a series of pulsations, very unequal among themselves, a single one will occur one half shorter than the rest. This produces something like an intermission—and it completely resembles the latter if the pulsation be very weak. "These irregularities, as to frequency, take place most usually in persons affected with dilatation of the heart." The variations under consideration occur only in the heart, as heard by the ear or stethoscope—they make no sensible impression on the pulse, as felt at the wrist. We shall, therefore, pass on to more palpable irregularities of the heart's action.

INTERMISSIONS OF PULSATION.

By this we understand, of course, a sudden and momentary suspension of the pulse, during which the artery is no longer perceptible beneath the finger. The duration of this intermission is very variable—being sometimes longer, sometimes shorter, than a common pulsation. There are two kinds of intermission—one *real*, consisting in an actual suspension of the heart's contraction—the other *false*, resulting from contraction so feeble as to be incapable of perception by the finger on the artery. Intermissions of the first kind are most common—they are frequent in old age, even when the health is good—or when the indisposition is only slight. "In middle age, they are *only* observed in certain diseased states of the heart, particularly hypertrophy of the ventricles, and during palpitation." In this we cannot agree with Laennec. We have seen so many instances, "in middle age," where temporary intermissions of the pulse were occasioned by flatulence, indigestion, acidity in the stomach—nay even by emptiness of that organ,—that we rarely attribute any importance to this phenomenon, unless it be accompanied by other symptoms indicative of disease in the central organ of the circulation. Our author informs us that, by means of the stethoscope, we can clearly ascertain that "this species of intermission always succeeds the contraction of the auricles—it therefore differs only from the natural quiescence after this contraction in the irregularities of its recur-

rence." "If," says he, "in our examinations, we content ourselves with feeling the pulse, without applying the stethoscope, we shall, of necessity, confound this true intermission with the false one formerly mentioned produced by variations in the duration and force of the heart's pulsations."

"The last species of intermission is that which consists in the absence of one complete pulsation, recurring sometimes with an exact periodicity, after longer or shorter intervals, the pulse being in other respects regular. This pulse constitutes, according to Solano, the precursor of a critical diarrhoea. This peculiarity of the circulation is by no means rare; I have observed it frequently in some epidemics, but not at all in others, owing no doubt to the particular constitution that prevailed. This kind of intermission corresponds more frequently to a contraction of the ventricles, much weaker than the rest, than to a real interruption of their action; and, indeed, in such cases we often perceive an extremely feeble pulsation in place of a total intermission."

In a note appended to this passage, Dr. Forbes states as follows:

"In certain cases of diseased heart I have observed this species of intermission under a form which was sometimes productive of curious results. Every second pulsation was so feeble as to be altogether or almost entirely imperceptible. In the former case, the pulse appeared to be quite regular and slow; but, while in the act of feeling it, the intermediate or *latent* pulsation (if I may use the expression) became suddenly distinct, and the pulse was instantly *doubled*. In this manner I have known the same patient with a regular pulse at fifty or sixty, and a regular pulse at one hundred or one hundred and twenty, within the space of three minutes."—*Transl.*

Dr. Johnson was the first to point out this species of intermission several years ago, in the case of a gentleman residing in Bond-street, a patient under the care of Mr. Cosgreave of this metropolis. In this case, the ventricular actions were usually double those of the tangible arteries. But when any feverish excitement took place, the pulse became double the usual number or more, at the wrist, and corresponded exactly with the pulsations of the heart against the ribs. In by far the greater number of cases where we have observed intermissions of the pulse, there was an action—evidently a ventricular action of the heart, at the moment of the intermission at the wrist. Laennec has filled some pages with very obscure, not to say unintelligible reasoning respecting certain peculiarities of the pulse, without attempting any explanation of the cause of intermissions. One of the conclusions to which this great pathologist has come, is, in our opinion, a great error—namely, an independent pulsation in the arteries, without any impulse from the heart.

From an attentive observation of this phenomenon (intermission of the pulse) and where we have had very good opportunities of investigation, we have come to the conclusion that, in all cases, it depends on an unsuccessful action or contraction of the ventricle—not on an intermission of the ventricular contraction. The causes, however, of this abortive action of the ventricle are various. In very many cases, it is dependent on sympathetic associations of the heart with other organs, especially with the abdominal viscera; in which cases, the intermission of the pulse is not constant, but only temporary. Where there is a permanent irregularity in the action of the heart or in the pulse, we believe there is generally some valvular disease, or alteration of structure. It may admit of much doubt, indeed, whether disease of the simular valves, or of the mitral valve be most productive of intermissions of the pulse. For our own parts, we are inclined to impute permanent intermissions more to imperfections in the former than in the latter apparatus. It is curious that neither Laennec nor his translator has alluded (as far as we can see) to valvular disease, as the cause of intermissions and other irregularities (we always mean *permanent* irregularities) of the pulse. Yet we think these irregularities, when not merely

temporary nervous affections, are, in three cases out of four, dependent on this cause.

SPASM OF THE HEART—WITH BELLOW-SOUND AND PURRING-THRILL.

Although the sounds above-mentioned frequently attend organic diseases of the heart, yet it is certain that they may exist in consequence of a purely nervous affection. But in these cases, "it is always attended by symptoms which constitute a real state of disease." The bellows-sound is most commonly heard in hypochondriacs—particularly in those of a sanguine and plethoric temperament—in which cases the sound is usually heard in some of the arteries at the same time—frequently passing from one to the other. It is sometimes continuous—sometime intermittent:—in the latter case, it recurs on the slightest agitation of body or mind. The symptoms which accompany it are the more severe in proportion as the sound is greater, more continuous, and extending to a greater number of arteries.

"When it is very constant and distinct, but confined to the heart, there is almost always more or less dyspnœa, with a feeling of greater or less debility, so that the patient can, in many cases, hardly walk. These symptoms are still more marked, if the purring-thrill accompanies the bellows-sound. There is commonly but slight nervous agitation, particularly when the patient is quiet; but on attempting to walk rather quick, or for any length of time, he is soon out of breath. and, in the severer cases, the head becomes confused."

When this affection is unconnected with any organic lesion of the heart, it must be treated as a nervous complaint.

NEURALGIA OF THE ARTERIES.

Pains more or less acute, continued, or intermittent, sometimes follow the course of the arteries, and appear to have their seat in the nervous filaments supplied to these vessels by the ganglionic centre. They occur most frequently in hypochondriacs and in nervous females. A blister to the part thus affected, is considered by Laennec as the most effectual application.

PRETERNATURAL PULSATIONS OF ARTERIES.

These are regarded by Laennec as convincing proofs "that the arteries have an action of their own, independent of that of the heart." When any one will show us a pulsation in an artery, when there is no corresponding ventricular contraction in the heart, then, and not till then, will we believe that the arteries can pulsate independently of any impulse from the heart. Such a phenomenon we have never yet seen—and we verily believe that such a phenomenon has never been seen or felt by man. But Laennec says that one carotid will be found to beat more strongly than another—and this is another proof of the dependence in question. We do not think so. If the arteries have a *pulse* independent of the heart, that pulse must consist in the *distention* of the vessel—for its contraction surely could not be felt by the finger. And is Laennec or any other man prepared to say that the arteries have a power of *self-distention* sufficient to constitute a pulse, or throb, independent of the rush of blood sent from the heart? If one artery is found to beat more strongly than another, are we sure that there is nothing which impedes the flow of blood *into* the latter, or *out of* the former? We apprehend that the inequalities of pulsation in arteries are more dependent on such circumstances than on any power which an artery may possess of more strongly dilating at one time or place than at another. Laennec instances the increased pulsation of an artery leading to an inflamed part, as to a whitlow. Is not this a case directly in point and corroborating our position?

III.

1. *General View of Lunatic Asylums, &c.* By SIR ANDREW HALLIDAY, M. D. &c.
2. *Practical Observations on Insanity, &c.* By W. J., Late a Keeper at a Lunatic Asylum.
3. *Outlines of Lectures on Mental Diseases.* By ALEXANDER MORISON, M. D.

The subject of Insanity and of Lunatic Asylums has lately engrossed so much attention, both in and out of Parliament,—both in and out of the profession, that we need offer no apology for dedicating an article to it in this place. That state in which the mind of man is in abeyance, and all his godlike faculties levelled in the dust—a state in which he is no longer able to protect or defend himself, imperiously claims our sympathy, and demands our most attentive consideration. “To behold the good, the great, the virtuous, and the brave, reduced by the withering influence of this awful visitation, to a level with the beasts of the field, on which the bright beams of reason never dawned, is, indeed, calculated to excite, in every feeling and philanthropic mind, sensations of the most painful nature.” These painful emotions will not be mitigated, when we reflect that such unfortunate beings (still our fellow-creatures) have, for ages past, and even in this boasted land of liberty, been consigned to chains and dungeons, subjected to the care of mercenary wretches, who would scarcely have been tolerated to look after the felon, the murderer, or the most depraved and worthless portions of a redundant population!—All this, too, while pseudo-philanthropists have traversed the utmost limits of the empire, to inquire into the situation, and improve the condition of convicts—passing heedlessly by the cold and loathsome dungeon, where the guiltless and unhappy maniac was pining in hopeless captivity.

“It is true that a spirit of inquiry has been abroad of late; parliamentary committees have been instituted; the most atrocious cruelties have been brought to light; and it has been proved beyond the possibility of a doubt, that so far from any curative measures having been resorted to in the treatment of the insane, the method pursued has been such as must have had the effect of driving to irretrievable madness thousands who, under a system of ordinary mildness, would have been restored to society.”

We are informed by Sir A. Halliday, who appears to have paid great attention to this subject for 25 years past, that it was not till 1774 that the attention of Parliament was drawn to Lunatics and Lunatic Asylums. In that year, an Act was passed, the inadequacy of which has been daily and hourly complained of ever since. It provides for the casual inspection of licensed establishments, but neither authorises the correction of abuses, nor permits the active interference of the visiting Commissioners, even

where the most flagrant instances of mal-treatment are detected! That such an Act should have remained so long a blot on the Statute-book, might hereafter excite astonishment, were it a solitary blot—but, alas! the ignorance of law-makers is only equalled by the negligence of those to whom the execution of those laws is entrusted!

The little good that was done by this Act, to the wealthy inmates of licensed Asylums, was soon lost sight of—and it was never meant to apply to that helpless class of sufferers—the *insane poor of the kingdom*. These remained in a wretched and deplorable condition, when Sir Andrew, in a letter signed “*MEDICUS*,” (1826) and addressed to Lord Henry Petty, induced Mr. Wynn to move for a Select Committee to investigate the subject. The result was an Act, authorising Magistrates to erect public asylums for the insane poor. After a lapse of seven years, a renewed inquiry took place, at the suggestion of Mr. Rose, and the evidence elicited upon this occasion, must be fresh in the memory of all. A bill calculated to remedy the evil was three or four times passed through the Lower House—but rejected in the HOUSE OF LORDS!! After Mr. Rose's death, it got into Chancery—and there it has slumbered for *nine years*—Lord Eldon not being able to make up his mind on the subject! Again the House of Commons has taken up the inquiry—and sincerely do we hope that justice, though tardy, may at length be done.

By Mr. Wynn's Act, the Magistrates, as we before observed, were empowered to erect, at the public expense, Asylums, or Hospitals for the treatment of the insane poor, under their own immediate inspection and government—but although twenty years have elapsed, it is only in the counties of York, Lancaster, Nottingham, Norfolk, Stafford, Bedford, Gloucester, Lincoln, Pembroke and Cornwall—ten out of fifty-two counties, that asylums have been opened. The Magistrates of Middlesex, after two years' deliberation, have just announced that such an institution was necessary in a metropolitan county, where 873 of their fellow-creatures were proved to be suffering all the miseries of neglect and cruel treatment, from the want of such an institution!

“By parliamentary returns we learn that, in 1826 there were 1321 individuals in private asylums, exclusive of those in London and Westminster, and within seven miles thereof. And 1147 in public asylums, exclusive of those in St. Luke's and Bedlam, and 53 in public gaols; giving a total for the several counties of England and Wales, of 2521. The private asylums, in and near the metropolis, may be taken at an average of 1760; they were, last year, 1761, and St. Luke's and Bedlam at 500: we have thus, for the whole of England, a total of 4782 insane persons, known to be in existence, and publicly accounted for according to law. But there is a number, if not equally great, at least nearly so, of whom the law takes no cognizance, and whose existence is only known to their relatives and friends. These consist of individuals placed in solitary confinement, with persons who take only one patient. This is a state of things that ought not to be allowed to remain as it is, for a single hour, in this land of boasted liberty. I do not say that it ever has taken place, though I have known one or two instances that might almost bear such a construction: but I maintain that it may take place, for there is no law to prevent it; that individuals have been sent into such seclusion, who never suffered from the pangs of madness, and it must be

evident to every one who gives this subject the least consideration, that it only requires a faithful keeper and strict watchfulness to retain such persons in prison for life."

From a long and laborious investigation, Sir Andrew is convinced that the aggregate number of persons actually in confinement, in public and private asylums, and with their relations, or with individual keepers, in England and Wales, exceeds *eight thousand*—more than two thirds of whom are curable, and who, by proper means, might be restored to the enjoyments of social life. Sir A. does not think the malady is on the increase among us, as some authors have supposed. It is curious that insanity is most prevalent in the counties of York and Lancaster—in Wilts, Stafford, Durham and Gloucester. Wales, in proportion to its population, has very few lunatics—"and the same remark holds good in respect to the *Celtic* tribes in other portions of the empire." The same author remarks that, where the said Celtic tribes have been little mixed with the Saxon or Norman blood, "insanity is scarcely known," except as arising from diseased structure or mal-formation of the cranium:—"idiots are therefore more frequent than lunatics." We have some doubts of the truth of the following position of our ingenious and learned author.

"It is not by seclusion and mystery, that they can be properly watched over, or by confinement in the wards or cells of an hospital, that they are to be cured. Experience has shown that a *regulated intercourse with the world*, and constant employment of the mind and body, are the best aids to medical treatment, and in the construction of every asylum, these ought constantly to be kept in view."

We are no advocates for mystery, in any case; but we can hardly think that "an intercourse with the world," is prudent, till the insanity is nearly, or very considerably abated. Whoever has gone into a lunatic asylum must have observed the instantaneous excitement called forth by the appearance of a stranger (and it would be far worse with a friend) amongst the unfortunate inmates of these dreary abodes. Every tongue is at work in pouring forth the injustice which is done them,—every nerve is strained in the attempt to convince the visiter of the reality of the ideal hallucination which has taken possession of the mind. Can these excitements and perpetual reiterations of the monomaniac impressions be conducive to a cure? We should think they are not. Is not the first and fundamental principle of treatment, in insanity, a removal from *friends*—and consequently from all sources of irritation? If an intercourse with *strangers* produces some degree of excitement or irritation, should not this intercourse be prohibited?—We think the following passage, from the same author, justifies this proposition.

"The best regulated public asylums in England, are those for the West Riding of York, at Wakefield, and for Lancaster. Bedlam, the great national or metropolitan asylum, is now well conducted, and the patients are humanely and judiciously treated; but it has still too much of the leaven of the dark ages in its constitution, and too rigid a system of quackery is maintained, in its regard to being seen and visited by re-

spectable strangers, and there is too little space for exercise and employment, for it ever to prove an efficient hospital. In some respects it is little better than when, in fact, it formed one of the *lions* of the metropolis, and the patients, as wild beasts, were shown at sixpence for each person admitted. I dislike, and decidedly condemn the practice of being carried around by a governor, and then asked to record an opinion of what we have seen and heard during our visit. It is the assumption of secrecy that creates extraordinary curiosity, and probably, for a time, improper visitors might be drawn to the scene; but let Bedlam be as open to the public as the other hospitals in the kingdom, and none but those called by business or affection will ever think of asking for admission. St Luke's, the next in importance to Bedlam, is only fit to become a prison for confirmed idiots. It is worse than useless as an hospital for curable lunatics:—not so much, I would observe, on account of what may be called the close borough system upon which it is managed (though even that merits condemnation in an establishment founded and endowed by a liberal public), as from its possessing none of the advantages now found most necessary for the recovery of the insane;—and if ever St. Luke's Hospital is to be made available for the purposes for which its funds have been accumulated, it must be by adopting a plan similar to that which exists at Antwerp, and of which I shall give some account when I come to treat of the hospitals in the Netherlands."

Sir Andrew has thrown out many hints which may prove useful to those concerned in the erection of these asylums; and as medical men will, of course, be consulted by the magistrates on these occasions, we would recommend them to peruse our author's work in the original. We shall glance at a few of our author's observations.

He remarks that the great objection to the majority of asylums in England, is the want of space for work-shops—and of grounds for agricultural labour. At Wakefield, the patients have uniformly been kept employed at their various trades, and in rural occupations, with the best effects. Dr. Ellis informs Sir A. that no accident has occurred from allowing the insane the use of the necessary instruments. The same remark applies to the Lancaster Asylum—and, in a more limited manner, to some other institutions in the country.

The great expense which will be necessary for the erection and maintenance of the projected Middlesex Asylum, has formed a ground of loud complaint. This Sir A. thinks, is an erroneous objection. A large sum will, unquestionably, be required in the first instance, "but hereafter the parishes will be relieved from a very heavy and increasing burden." The county now pays for more than 800 pauper insane, and the number is not likely to decrease, from the modes of management and treatment pursued.

After taking a rapid survey of Lunatic Asylums in Scotland, Ireland, and several states on the Continent—from which it will be seen that, in many countries, especially in Germany, the unfortunate lunatic is still worse off than here—Sir A. throws out several valuable hints for the consideration of Parliament in the construction of the new Act. The inefficiency of the present system of licensing and inspecting mad-houses, is forcibly dwelt on. Besides the local visitors recommended by the committee, Sir A. thinks that the Secretary of State should be authorised to appoint four persons as General Inspectors for England and Wales, "who should have all the powers proposed to be given to the Local

Inspectors or Visitors; and who should be obliged to report annually to Parliament, as is done by the Inspectors General in Ireland." He observes properly, that no establishments should be exempt from such visitations, remarks, and observations, as the Inspectors may think proper to make in their annual reports. It is not necessary to give these Inspectors any controlling power over the local authorities:—"the right of visiting and examining the patients and servants will be quite sufficient for all the purposes of a general superintendence."

Sir A. has made a few observations on the nature of insanity, which are not very happily conceived, or at least expressed—though by no means erroneous in their foundation.

"A certain part or portion of the instruments of the mind are thrown from their natural position, and have, consequently, become unfit to perform their regular duties. We have two eyes, yet we only see objects single; but let one of the eyes be pulled or pushed from its parallel movement with the other, and we immediately see the object double. In this case the other external senses correct the defect of vision, and assure us that the order of nature, as to vision, has been interfered with, and that the impression made upon the mind is not correct; for we can feel that there is only one candle upon the table, though we see distinctly that there are two. But with regard to the intellectual faculties, whether the impressions are conveyed to the mind from external objects, or are conveyed from the mind to the external world, we have not the same means of ascertaining, that the organs or instruments that form the connexion between matter and mind have become disordered or deranged; therefore our ideas are expressed in the form or manner in which the mind beholds them. We may suppose an individual, who, by a slight paralysis of the muscles of one eye, occurring in the dark, will see two candles when only one is brought into the room; and that, being unconscious of what has taken place, he would maintain that what he saw was correct, until he had explained to him the cause of such double vision, and had ascertained by actual examination, that the fact was as so explained. So the insane person, receiving his impressions through a diseased or disordered medium, has them actually conveyed to the mind in the form in which they are expressed; but there being no means of proving, by any other faculty, that the impression is incorrect or improper, he believes himself perfectly correct in what he expresses, and, indeed, is only expressing what he actually feels; in the same manner as the person who saw double, without being aware of the cause, insisted that there were two objects when there was only one, because he actually saw two."

We believe with our author that, except in cases of dementia or idiocy, from a general imperfection in the cerebral mass, we seldom find even the most furious maniac insane on more than one point. To reason with him on this point would be equally useless and ridiculous—but upon all others we should treat the madman as a human being in sound mind.

We must turn for a short time to the production of a man who humbly styles himself "a late keeper at a lunatic asylum." If we may judge by the language and sentiments contained in this little work, we would be inclined to suspect that the author moved in a higher circle—or, at all events, *ought* to have moved in a sphere much higher than that of a keeper at an asylum. Be this as it may, the anonymous author has shown that he is intimately acquainted with the subject of which he treats—and if he has been only a keeper, we say that his observations are *therefore* not the less valuable.

The intelligent writer observes that lunatic asylums are springing up in every part of the country; but queries whether they are called for by the actual increase of insanity—are instituted in consequence of the inefficient systems pursued in those already established—or for “the incarceration of many persons who cannot consistently be brought under the denomination of lunatics.” In support of this last accusation, for it amounts to little less, the author makes the following averment. “I have myself seen persons in lunatic asylums, for whose confinement I could not see even a colorable necessity.” We can hardly doubt the truth of this statement when we reflect that a man may be incarcerated by the certificate of a chemist’s apprentice just emancipated from his indentures!

“It is doubtless a matter of very great convenience to many persons, that there are places to which troublesome or eccentric relatives or friends may be packed off out of the way: and it is probably, at times, very convenient for some people to have the management of the property of others. An unfeeling and brutal husband may exasperate a sensitive and amiable woman by his neglect and cruelty, until with continued harassings, her mind becomes irritable and unsettled; she may be in the way on other accounts, and her husband may be anxious to get rid of her; he tells his own tale to a pliant physician, who calls to examine her, and the very questions he puts, implying doubts of her sanity, excite her to give irritable and incoherent replies, and she unconsciously seals her own doom; and the gloomy walls of a mad-house, the association with lunatics, and a strait waistcoat, soon finish the work which villainy began.”

This may be said to be an extreme case; but our author questions “whether it is not with these extreme cases, that half our mad-houses are filled.” He adduces the case of an elderly female now confined in a lunatic asylum, who, in every instance, conducts herself with the most scrupulous propriety. Her only point of weakness is, the notion that she is a lady of rank and title—and that unattended with a single circumstance which could render her obnoxious to society. It is certainly a great shame that people of this description should be immured in those places where every thing around them tends to embitter the remaining hours of their existence. It is the duty of all medical men connected with such asylums, either as attendants or as inspectors, to remonstrate against such abuses.

“Another instance I may mention, of a fine youth about twenty years of age, who is in every respect in full possession of his mental faculties; and whose only disorder appears to be deficiency of mental energy. It cannot even be called weakness of intellect, for when he is by any means roused to exertion, he not only evinces a sound judgment and discriminating powers, but is capable for a time of considerable mental labour, in studying a language for instance, or any other subject to which he may apply himself. Can any one suppose for a moment that a mad-house is a proper place for such a character as this?”

In these cases, our author does not see that any positive blame attaches to the proprietors or keepers of asylums—“they are mere passive agents.” This we grant. They depend, for their existence, on the patronage of the medical profession, and it would be too much to expect of human nature, that they should run counter to their own interests, and dictate to

the attesting physician or surgeon. Our author informs us that, in many instances, the form of the physician's certificate is dispensed with altogether—in other instances, the chemist or his apprentice performs the ceremony of deposition!

"It is true that commissioners are appointed, whose duty it is to inspect lunatic asylums, and to scrutinize their management; but their visits are like those of angels,

"Few and far between;"

and are generally mere visits of courtesy; for as to any useful purpose, their control is a mere dead letter, inasmuch as they have no power to inflict a penalty, or even to refuse a licence for the future, however gross may be the abuses they have detected."

The author makes many judicious observations on incipient insanity and its causes. His experience corroborates that of many others as to the effect of religious enthusiasm in deranging the mental faculties, especially among the weaker sex. He properly condemns the practice, too often pursued, of putting persons in this state into public asylums, where all chance of cure is taken away by the scenes that surround them.

"I have witnessed cases in which the most serious consequences have ensued from placing patients in an incipient state of insanity in contact with confirmed lunatics. I remember a gentleman whose disorder was an excessive state of nervous irritability; he was a tradesman in affluent circumstances, and lived in a style suitable to his means. His friends deemed it necessary that he should be removed to a lunatic asylum; and the comforts provided for him there, were far inferior to what he had been used to at home. In a very short time the change caused an accession of excitement, so that he became troublesome, and disturbed the more peaceable patients in that part of the house in which he was lodged, and he was removed into the common ward, and placed amongst lunatics of all classes. Never shall I forget the dreadful state of agitation in which he continued during the whole of one day; he refused to sit down, or to take any food, and stood shaking like an aspen leaf, his wild eyes wandering from patient to patient, as their gestures or exclamations attracted his attention."

Our author next offers some observations on the treatment of incipient insanity. Of all means, in such cases, he considers travelling, where practicable, as the best. Next to this, he recommends seclusion with a private family in the country—or in a cottage, under the direction of a judicious keeper and a medical man. The superior skill of a physician who has the experience of a lunatic asylum, is, he thinks, more than counterbalanced by the bad effects of association with other lunatics.

The brain being the organ of thought, must, of course, be the seat of insanity. But, as our direct means of acting on this organ are very limited, we must turn our attention to the general health. "It may be safely asserted that the most important thing to be attended to, is the state of the digestive organs."

"I shall now merely recapitulate the means most likely to restore a healthy tone of mind: namely, change of scene, travelling, personal comfort, a cheerful and humane attendant, pure air, plentiful exercise, and, above all, a strict attention to the state of the alimentary canal. I have no hesitation in asserting, that, had such a system been more generally adopted, hundreds who are now doomed to perpetual confinement as confirmed lunatics, would have been restored to themselves and to society."

Upon the qualifications and duties of **KEEPERS**, our author makes many judicious observations, which are highly deserving of consideration. The eighth chapter, "On the Necessity of the Medical Profession paying greater Attention to the Subject of Insanity," is not beneath the notice of the medical practitioner. The author laments that, in medical education, the disorders of the mind (we mean of course its material organ) are almost totally overlooked. There should be lectures on insanity, as well as on other points of pathology. It certainly is not to be disguised, that the generality of practitioners are at a loss when they come to treat this important class of human afflictions.

"The frequent consequence of this ignorance is, that, when a medical man is called upon to attend a patient evincing symptoms of insanity, he is at a loss how to proceed; and if, after administering a few doses of medicine, and abstracting a few ounces of blood, the patient does not improve, he becomes fearful of the results of his own ignorance, and he hurries the hapless sufferer off to a lunatic asylum, frequently thereby consigning him to the care of others equally ignorant with himself, and subjecting him to the chance of a long train of evils which I have already pointed out."

We shall conclude with the following melancholy fact, which we fear is not a solitary one:

"Some time ago I was a keeper at a private lunatic asylum in the country. One day, when the medical attendant happened to be from home, a post chaise drove up to the door, and the driver delivered an order from a medical gentleman a few miles distant, to the effect, that proper persons should be sent immediately to remove a female lunatic who was to be placed under our care. It devolved upon me to attend to this; and, accompanied by a female keeper, I proceeded in the chaise to the house where the patient resided. I was shown into the room where she lay. I found her in a state of the most violent delirium, and already under the restraint of a strait waistcoat. Her face and head were excessively hot and flushed; she was talking incoherently; one of her eyes appeared starting from its socket, and its cornea was opaque. I felt her pulse, which I found excessively quick, small, and wiry; I then made inquiry of the attendants, and found that she had occasionally, for some months past, complained of violent pains in her head, and that she was taken much in the way in which I found her, only in the afternoon of the day before; but they did not then observe the change which had taken place in her eye; she was about forty years of age, and of a gross habit of body.

"Shortly after she was taken, a medical man was sent for, who merely prescribed a blister on the nape of the neck. She, however, got worse, and it required seven or eight persons to hold her; the medical man was again sent for in the middle of the night, when he merely put a strait waistcoat upon her, and said he would direct her removal to a lunatic asylum the next day!"

She was jolted, in this state, ten or twelve miles to an asylum, and expired in a few hours after arriving there!

"Immediately upon the death of the woman, I went to inform Mr. —, the medical gentleman who sent the case to us, and I was desired to express a wish that a *post mortem* examination should take place. He appeared no way surprised or concerned at her death, but treated it quite as a matter of course; and when I mentioned the subject of examination, he objected to it in toto. 'What good would that do?' said he. I replied, 'In order, if possible, to discover the immediate cause of her death.' 'Oh, nonsense,' was his reply, 'if any thing is found out, it will be more than ever was yet!'"

An examination was, however, instituted, when active inflammation of the brain was discovered!

The author concludes with some observations on drunkenness and masturbation as causes of insanity. We are quite aware that the latter vice is far more destructive of human life and human reason than is imagined. Medical writers are reluctant in portraying its dreadful effects—but experienced practitioners every day see the terrible consequences of this solitary vice on mind and body!

"I may, perhaps, be suspected of exaggeration, when I state what proportion the number of the insane from this cause bears to the aggregate; but I have it upon the authority of a gentleman who has had some hundreds of lunatics under his care, that full three-fourths of all recent cases, in patients from eighteen to thirty years of age, were insane from the effects of masturbation! Two-fifths also of confirmed cases may be assigned to the same cause. My own experience confirms this computation, and I think the relative numbers of males and females are about equal."

The author has appended to his work an abstract of the report of the select committee appointed to inquire into the state of the pauper lunatics in the county of Middlesex, 1827. The committee of 1815 endeavoured to draw the attention of Parliament to the following abuses—which abuses are found still to continue, after a lapse of 13 years!

"1. Keepers of the houses receiving a much greater number of persons in them than they are calculated for; and the consequent want of accommodation for the patients, which greatly retards recovery.

"2. The insufficiency of the number of keepers in proportion to the number of persons intrusted to their care, unavoidably leading to a proportionably greater degree of restraint than the patients would otherwise require.

"3. The union of patients who are outrageous with those who are quiet and inoffensive.

"4. The want of medical assistance, so applied to the malady for which the persons are confined.

"5. The detention of persons whose minds do not require confinement.

"6. The insufficiency of the certificates on which patients are received into mad-houses.

"7. The defective visitations of private madhouses, under the provisions of the 14 G. 3. c. 49."

The evidence adduced before the committee of 1827, but too fully confirms the existence of the above mentioned abuses. At the same time, we cannot help observing, that some portions of the evidence are couched in language which betrays a spirit of calumny that ought to have put the committee on their guard. We can so clearly trace such affinity between these portions of evidence and certain inflammatory harangues in the "JOURNAL OF DEFAMATION," that no doubt remains in our minds as to the source from whence the latter were derived. These, however, we shall pass over. The following testimony of Dr. Bright will confirm what we said respecting the abuses of certificates.

"Is there any case stated in the register, where a certificate was signed several months before it was put into execution?"—William Fox, a pauper from the parish of

of Lambeth, appears to be neglected by his family, and he alleged moreover, that he had not seen the medical man that signed the certificate on his last admission for several months before that period.' I recollect, not very long ago, seeing a female who had been in confinement for some time, and she stated that the medical man who signed the certificate, had just looked into her room and made a bow to her, and said no more, and upon a view so hasty as that, signed the certificate; that was the information of a person who had been an inmate in a madhouse.

"Was that a physician?—It was an apothecary in Islington. There is a case in page 237 of the Report, dated April 17th which states that a certificate had been signed by a medical practitioner by whom the patient had not been seen since August last, the certificate being dated in March.

"With regard, to the person signing the certificate, have the commissioners had occasion to remonstrate?—They have; the act is so exceedingly vague, that with great reluctance they are obliged to acquiesce in the signature of persons of whom they have no testimony as to medical fitness. There was a case, of which I was lately informed, of a person, a retail chemist and druggist, calling himself an apothecary, who induced a brother of his to sign some instrument, by which property to the amount of about 3,000*l.* was disposed of, and two days after the execution of that instrument, he took this brother to a madhouse, he himself signing the certificate as a medical person.

We have been led on, by our feelings, to an extension of this article, far beyond the boundaries which we originally intended for it. We shall offer no excuse for this trespass on the common and every-day occupation of ordinary matters in medical literature and medical science. The subject is one in which all medical men are more or less interested, and on which they are very frequently called for opinion as well as advice. It is highly incumbent on them to divest themselves of prejudice, and to calmly discriminate between use and abuse. We have had opportunities lately of visiting various lunatic asylums, public and private, and we have no hesitation in declaring that, even in those which have received the greatest degree of censure, there has been such an amelioration, that much of the evil is already abated. In respect to private asylums, we could offer testimony that would be grateful to every philanthropic breast, were we permitted to mention names. One of the hardships arising from this inquiry is, the indiscriminate opprobrium which has been cast upon all private institutions, from the abuses of a few. This, however, is an evil inseparable from all public investigations of this kind, and will only be temporary. The general good will, we hope, be permanent.

To the able work of Dr. Morison we are unable to do justice, since the letter-press contains only Outlines of Lectures. The plates are admirably executed, and express all the features of insanity with much fidelity and spirit. We strongly recommend this work to all those concerned in the management of the insane.

IV.

Delineations of the Origin and Progress of various Changes of Structure which occur in Man, and some of the inferior Animals; being a Continuation of Works already published on this Subject. By JOHN BARON, M.D. F.R.S. &c. &c. Quarto, with plates. Longman's, 1828.

WE have endeavoured to make the pathological investigations of Dr. Baron known as far as the circulation of this Journal extends; but we believe that his researches into changes of structure connected with hydatids and tubercles have not made much impression on his countrymen—much less so indeed than on the pathologists of other countries. We do not attribute this neglect to want of interest or importance in the subject—because pathology, in general, is not so much to the taste of our countrymen as it ought to be. When Dr. Baron hopes that the reader, in order to fully comprehend what he has here brought forward, will re-peruse his former volumes, he woefully miscalculates the taste of the day—the occupations of the profession—and the kind of literature which prevails. Dr. Baron has quarrelled most unmercifully with some of our continental brethren for mistaking certain opinions and expressions set forth in his former publications; but the fact is, that Dr. Baron's style is, in many places, very obscure, and we venture to assert, that not one half of his own countrymen have clearly understood him. Some allowance also should be made for the French physicians, few of whom are complete masters of the English language. If they have done Dr. Baron injustice in some things, they have done him more than justice in others. They have conferred on him a title which his own ungrateful country has hitherto withheld. He is much more frequently spoken of in the foreign Journals, as "SIR JOHN," or "M. le Baron," than as plain Dr.* This ought to have disarmed him of half his ire. This French politesse has been badly repaid by such hauteur, or rather contempt, as the following mode of speech indicates. "A writer, who signs himself MERIADEC LAENNEC," &c. Dr. Baron will not enhance his own dignity by this mode of address to respectable foreigners who take notice of his works. All this ire has arisen from Monsieur Laennec mistaking Dr. Baron on the subject of generation of hydatids. Dr. B observed that the same state of the system which calls into existence a solitary tubercle, may *generate* an indefinite number. The Frenchman thought that it was from the original or mother hydatid, that the future generations

* Dr. Wilson Philip is very generally styled "Sir W. Philip," both on the Continent and in America. We sincerely hope that these complimentary mistakes of our polite neighbours, may soon be converted into realities.

sprang—and thus Dr. B. was misunderstood on (what he considers) a most important point of pathology. It is clear that Dr. Baron is well aware of the animalcular nature of hydatids; but his object is not to explain the origin of these bodies, so much as to trace their change into a tubercular state, which constitutes the progress of the disease he has been so long investigating.

“ Admitting for the sake of argument, that hydatids are animalcules, it has, I trust, been shown that it is to the loss of the hydatidal character altogether and the transformation of these bodies that the morbid appearances in this and many other diseases are to be referred.”

The doctor's design is, to show that such transformations do take place, and occasion a great variety of disorganizations in the animal frame. This doctrine, he conceives, has nothing to do with speculations respecting the origin and vitality of hydatids. We agree with Dr. Baron that the pathological questions at issue cannot be properly determined by examining disorganizations in their last stages, when all the elementary characters are lost. It is by tracing them through all their progressive changes that satisfactory information can be obtained. It is obvious that this can only be done (except on very rare occasions) on inferior animals. The inquiry, in this way, can happily be prosecuted as well in this country as on the Continent, where human pathology has greater advantages.

We think Dr. Baron has occasioned a great waste of useless learning in his attempts to trace auscultation and percussion to Hippocrates. No one can fail to see that Dr. Baron is less actuated by a desire to promote these aids to diagnosis, than to prove that the discovery was not French—Dr. B. being an antigallican worthy of the days of Pitt. When will science divest itself of these little narrow prejudices, and look to truth as the only object of pursuit, without any regard to the soil which produces it?

In the second chapter, our author comes immediately to the real business of the book. The lungs, he observes, from the peculiarity of their structure, do not offer so good a field for tracing the disorganizations in question as the liver. In this last, the slightest deviation from the natural condition is easily discernible, and the contrast between the unsound and healthy part is very manifest. It is, also, an organ which is more frequently diseased in the inferior animals than almost any other viscus.

“ There are two ways in which the first indications of the class of diseases now under consideration become visible. The one is denoted by the enlargement or greater developement of the lymphatics; the other, by the formation of little vesicles. Both these, for the most part, occur together in the same organ; but it is sometimes otherwise.

“ To illustrate this matter a little more fully, I shall state what any one may witness who will examine the first appearances of the changes in question. Let us take for example a liver that is becoming diseased. The first thing that strikes the eye is a manifest enlargement of the lymphatics. They are quite apparent, and evidently occupy a larger proportion of the organ than they do in their natural state. At this time they may retain their transparency; but generally they soon

become opaque, and white, or of a pearl colour. A section of the organ at this period gives a mottled appearance not unlike that which is exhibited by the cut surface of a nutmeg. As the disease advances, a greater disproportion is exhibited between the diseased and sound parts. The white portion very much predominates. Ultimately, the brown or interstitial parts, which are remains of the proper glandular texture are altogether removed, and an apparently scirrhous mass is left in its stead. The different steps in this progress will be more clearly demonstrated when I come to the description of the plates. This may be considered as one of the most frequent and simple forms in which disorganization takes place. It is very often found in this state in one viscus, or even in one portion of a viscus; while other parts exhibit it in combination with other changes, some of which I am now to notice.

"These consist in the formation of vesicles, and tubercles, and tumours. The first step in this series of disorganizations may be accomplished in one of two ways. One is, the expansion of the lymphatics at the point of intersection where different branches meet. This variety, of course, occurs most frequently in the substance of the viscera, where the distribution of the lymphatics is different from what it is on their surface. The other occurs when the vesicle is formed immediately in the course of the lymphatic trunk. In the first mentioned case the vesicle is not quite so regular in its shape as it is in the last; and as it advances, and becomes consolidated into a tubercle, there is in some instances a sort of contraction which gives the surrounding part a radiated, puckered, appearance: all the lymphatics which are connected with the tubercle being thickened and changed."

Dr. B. then dwells somewhat minutely on the course or progress of tuberculation. In the first instance, a small vesicle is formed. It may go on advancing in size, and retaining its transparency, not materially interfering with the functions of the organ. Supposing the liver still to be the scene of action, the following phenomena will present themselves to the attentive pathologist.

"To illustrate my meaning, let the reader suppose, what very often occurs, that a vesicular body of this kind is generated a little way below the outer surface of that organ. It increases in size in every direction, and, at length, a small portion of its circumference is seen like a transparent speck amid the dark surrounding texture. This part becomes more visible as the body grows; and, as its magnitude increases, the manner in which it dispossesses the true texture of the part, where it is formed, is beautifully seen. In the liver, where the glandular texture is divided and subdivided, these partitions may be perceived gradually expanding like a thin film, or curtain, over the increasing growth of the vesicle. After a time they are completely absorbed, and the boundaries of the disorganization become clearly defined.

"When the first small deviation from the healthy state shows itself, it is not accompanied by change either in the colour, or texture of the adjacent parts. They retain their original properties, and it is not till the morbid part undergoes its other changes, and assumes consequence either from its increasing bulk or from the interruption that it may cause to the functions of the organ, that any material alteration in the contiguous structure is perceptible."

The inferior animals will furnish any one with these illustrations—but to those who will not take the trouble of investigating nature, Dr. Baron's plates present an excellent succedaneum.

"In the lungs, the primary condition of the disorganizations is not less illustrative of the above description. The clear and untransformed vesicles may be seen here and there interspersed through its substance, or studded over its surface. In this state, unless they happen to be formed in great numbers, and at no great distance from each other, they cause but little interruption to the functions of the part; but things do not re-

main long in this condition. A change both in the diseased structure, and the portion of the lung connected with it, soon takes place; and, subsequently, all those progressive alterations occur which I have elsewhere endeavoured to describe."

Before entering on a description of the plates, Dr. B. details the results of a few experiments on rabbits—which are, however, only a repetition of those detailed in his former work, as performed by Dr. Jenner. That gentleman found that it was possible, by feeding animals on unwholesome food, to call up diseases in different organs, especially in the liver. He ascertained also that, by altering the external circumstances, and improving the diet, those disorganizations, which had advanced to a considerable extent, might be removed.

"I had it not in my power, on a former occasion, to describe the different steps in the progress either towards disease or a restoration of health, because I was not furnished by Dr. Jenner with any thing farther than a statement of the general result of his observations. I therefore deemed it proper to bring the subject more immediately under my own eye, and to watch the various stages in the processes to which I have referred. For this purpose I placed, about the end of last April (1825), a family of young rabbits in a confined situation, and fed them with coarse green food, such as cabbage, grass, &c. They were perfectly healthy when put up: on the third of June one of them died. On examining its liver, the primary steps in the disorganizations, which I am now considering, were evinced in a very manifest and interesting manner. The first thing that showed itself was a number of transparent vesicles about the size of a pin's head studded over its external surface; some few of them had attained a larger size and might equal the tenth of an inch in diameter. With these appearances there was an increase in the magnitude of all the lymphatics of the organ. This was visible in the superficial ones, as well as in those which belonged more particularly to the proper texture of the organ: and it was chiefly at the points of intersection of the latter that the transparent vesicles, above described, were seen. These appearances were also visible on cutting into the organ, but it did not exhibit any other mark of disease.

"On the 12th of June another rabbit died: in it the disease was considerably farther advanced. The whole liver appeared of a lighter colour, and was somewhat enlarged. It was studded with tubercles; some of them semi-transparent, others quite opaque, and nearly firm in their texture, and of a bright yellow colour. A corresponding increase in the disease of the lymphatic vessels was also apparent; that is to say, they were larger than in the last case, and had lost their transparency; and there was, of course, a corresponding diminution of the natural hepatic texture.

"June 16th. A third rabbit died this day. The progress of the disease was very clearly marked. One of the lobes was universally pervaded by small tubercles about the size of millet seed: they stood prominent on the outer surface so as to give it a granulated appearance. They were developed in such numbers as almost entirely to have taken place of the true hepatic structure; and to leave a mass of irregular surface and of a straw or ash colour in its stead. Attached to the lower surface of the liver there was an hydatid about the size of an hazel nut.

"June 18th. This day a fourth rabbit died: a considerable number of hydatids were attached to the lower surface of the liver, and lay between it and the smaller curvature of the stomach. They were not quite globular, and were becoming opaque; and their contents in colour and consistence looked like calves' foot jelly. There were six or eight similar, but smaller and more transparent bodies attached to the omentum.

"The liver itself contained many tubercles, but fewer than in the last case. They had been developed at greater distances from each other; and had consequently acquired a greater size. The other parts of the viscus were apparently sound.

"At this time I removed three young rabbits from the place where their companions had died to another situation. They had all the external signs of being diseased like those already described. They were remarkably low in flesh, whilst the abdomen was tumid, and the whole skin scaly and unhealthy. Their new abode was dry, and kept clean; and they were fed chiefly upon bran and oats, with a moderate proportion of clover and dandelion.

"About ten days after this change had taken place I killed one of them. The animal had increased a little in flesh, but the other external signs of disease existed, and the progress of the internal disorganization had not been arrested. The liver was very much enlarged, and there was a greater development of the whole of the lymphatic system of the organ than in any other of the former instances. There were also a very great number of the tubercles of different sizes and in different stages of their progress, so that scarcely any part of the liver remained in a sound state. In Plate III. Fig. 2, will be found a representation of this diseased part. Any one accustomed to examine appearances of this kind will perceive how formidable the disorganization is. I present it to the reader in order to show how far change may take place, and yet the healthy condition of the part be restored. In order to put this point to the test I killed the fellow of this last-mentioned rabbit on the 5th of August. It had been fed exactly as I have already described. It was very much improved in health, and on examining the liver it was found comparatively in a sound state. Its colour was natural, it was not much enlarged, and there were only a very few tubercles discoverable in it."

These facts, so far as they go, are very interesting, both as illustrating the origin and progress of disease, and in furnishing therapeutical hints that ought not to be overlooked,

The zealous author next proceeds to the detail of some facts drawn from the examination of several other animals, in which, disorganizations akin to those described, are frequently met with.

"On the second of April 1823 I had a horse killed which had laboured under glanders for nearly two years: most of the internal organs, but especially the lungs, liver, and spleen, indicated the existence of tuberculous disease: the former in particular evinced its ravages. Large portions of that viscus containing solid masses formed, some by the aggregation of tubercles of different sizes, and others which presented a bright yellow, firm texture without signs of division of parts, except when here and there, a well-defined circular body interrupted the uniformity of its appearance. It is extremely likely, for reasons which I have elsewhere stated, as well as from the appearance of other portions of this disease, that an examination of it at an earlier period would have shown the boundaries of its elementary parts in a much more distinct manner.

"A considerable portion of these diseased masses was in a state of ulceration, and had large and direct communications with the bronchial tubes. Corresponding diseased appearances were also found in the liver and the spleen. It is besides proper to mention that the mesocolon was thickened, and contained tubercles; and that the mesenteric glands were diseased and enlarged."

Dr. B. opened a sheep where tuberculous disease was advancing. Both lungs and liver showed the progress of the disorganization in a very clear manner. He also opened another glandered horse, when the disease had been of much shorter duration than in the former. The early stage of disorganization was, therefore, more conspicuous. The lungs, at first sight, appeared healthy. But, on closer examination, a number of circular vesicles were seen—some transparent—others opaque or yellow. Some presented an oblong shape, and seemed clearly to have been formed in the course of the transparent vessels, which Dr. B. conceived to be lymphat-

ics. There was not the slightest mark of increased vascularity in connexion with these disorganizations. Blood-vessels were seen traversing the lungs, as in a healthy state. Subsequently Dr. B. traced the same phenomena in other animals, especially in hogs. In all these examples, it was found that, except the increased magnitude of the lymphatics, and the occasional appearance of the vesicle, there was no indication of any other change. This, Dr. B. thinks, will apply to the early state of every variety in this genus of disorganizations :—thus demonstrating that diseases which we seldom or never see in the human subject, till they have entirely destroyed the texture of the parts they attack, take their rise from beginnings so small, and apparently unimportant, as scarcely to attract attention." In the second plate, Dr. Baron presents us with portions of the lung and liver of the same sheep. In each, the disease, in its early, as well as in its more advanced stage, is seen. The similarity in the progress, both as regards the disorganization itself and the state of the surrounding parts, is very apparent.

Dr. Baron next draws our attention to the origin and growth of tubercles and tumours in the uterus and its appendages. There is no disorganization of this genus more common than what is denominated ovarian—though the disease is very often unconnected with the ovaries themselves.

"In general the following is the progress discernible in this variety of disease. One or more transparent vesicles may be seen attached to the Fallopian tubes, or to any portion of the uterus or the parts contiguous. These as they increase in size undergo various changes, and at last a compound disorganization is formed, exhibiting different properties according to the time at which it may have been examined, and the actual state of its elementary parts. Two cases which I have lately examined are explanatory of this statement. In one the disorganization was in its primary state. There were distinct pellucid vesicles containing a transparent fluid, the smallest of which was not much larger than the head of a pin; the largest was about the size of an hazle nut. Some slight change had taken place in the coats of the latter, they having become, in some degree, dense and opaque. In the other case, of which a representation will be found in Plate III., a more advanced state of the same variety of disease may be seen. Clusters of vesicles, and tumours were found hanging from each Fallopian tube; and the progress in the transformation was demonstrable in the most satisfactory manner. One large vesicle of about an inch in diameter was quite pellucid; another, about the same size on the opposite side, was half pellucid, and half opaque and solid: the progress from the soft transparent state towards consolidation being thus clearly discernible. For a farther elucidation of this case I would refer to the Plate. It will be observed that the tumours hang downwards. This is not the position in which we generally find them in their last stages. The reason of this is obvious. If they increase much in size, their downward growth is necessarily prevented by the resistance which they meet with from the pelvis: they are, of course, forced to take another direction, and ascend into the abdomen, where they often acquire an enormous magnitude. For descriptions of the appearances of the disease, and for an account of the manner in which these appearances are formed, I must refer the reader to the different parts of my Inquiry, where I have described such disorganizations; and for proofs that these descriptions are faithful, the reader may examine the plates recently published by Mr. Lizars."

When tubercles are developed on the peritoneal surfaces, constituting ultimately that painful disease described in our author's former work (tu-

berculated accretion of the serous membranes) they may be seen, in their early stage, standing prominent and apart from each other, on the surface of the intestines, the colour and structure of the surrounding parts having undergone no change. But as they grow in size and number, other deviations become manifest. An increased vascularity may be seen; and with it a thickening and roughness of the peritoneal surfaces—and ultimately, the formation of those dense accretions, which often unite the whole of the abdominal viscera together. What are the obvious practical lessons deducible from these pathological inquiries? We shall let the author speak for himself.

“What boots it to be told when we detect an enlargement of the liver, or a tumour in the abdomen, or tubercles in the lungs, that inflammation acute or chronic has been doing its work? Did the practice founded upon this dictum ever enable us to overcome the disease? I believe that except under some rare and peculiar circumstances it never did. There is no good reason for believing, as I have often already stated, that inflammation causes, or even accompanies the disorganizations of which I have been speaking in their early stages. It may, and does sometimes, come on when they are advancing to their terminations, but even then it is by no means a necessary accompaniment, and is manifestly excited by the previous disease.

“What on the other hand, it may be asked, have been the means by which a constitution indicating the commencement or progress of these disorganizations, has been improved, and the threatened evils averted? By what agents have we seen tumours and morbid growths removed? Have the remedies that usually subdue inflammation been sufficient for this, or have not other agents been necessary? The experience of every man will answer. It is much to be lamented that our resources in this class of diseases are as yet so limited. If, however, their nature be such as it appears to be, it cannot be doubted that agents capable of controlling their progress may ultimately be acquired. Indeed I am convinced that remedies of that sort are already in our hands. Such remedies have removed many disorganizations that formerly would have resisted all known means; and there can be no doubt that their employment, in the early stages, promises results still more favourable. Unfortunately, the great difficulty lies in detecting the disease before it has assumed a fixed and formidable character. But that difficulty is not insurmountable. It may in part be obviated, first, by detecting the earliest morbid appearances; and, then, by associating them with the symptoms which they produce.”

Dr. Baron, no doubt, alludes to mercury, iodine, and some other medicinal agents in the removal of morbid growths. The doctrine of Dr. Baron is certainly very important, in a practical point of view, especially as regards that dreadful scourge of the human race—tubercular phthisis. Laennec is evidently of the same opinion as our author, in respect to the non-inflammatory nature of tubercles in the lungs. Experience also shows that the disease is not to be cured by depletion and low living. Tubercles in the lungs, as in every part of the body, produce, occasionally, inflammation and disorganization of the parts contiguous; but this is a very different thing from the production and growth of the tubercles themselves. In such cases, we must bleed locally to relieve the suffering sound parts, while we give tonics and nourishing diet to check the morbid process of tuberculation.

The description of four plates containing a great number of figures most beautifully drawn and coloured, conclude this fasciculus. We have endeavoured to convey as clear an idea, as possible, of the matter contained in the letter-press of the work; but Dr. Baron is a hard man to please; and we should not be much surprised if he complains that we have misunderstood him. We hope, however, to escape with more whole bones than “one who signs himself Meriadec Laennec,” appears to have done.

V.

Prize Memoir on "WHITE SWELLINGS" of the Joints. By Dr. NICOLAI, of Berlin.*

WE had imagined that the term "White Swelling" was pretty well banished from the surgical nosology, since the appearance of Mr. Brodie's work on the Diseases of the Joints. Mr. Brodie proved most satisfactorily that, under the above designation, were confounded diseases distinct and distinguishable from each other, having different causes, courses, and terminations, and requiring very different remedies for their cure or their treatment. The four principal diseases to which the textures, soft and hard, of the joints are subject, were described by Mr. B. under the heads of Inflammation of the Synovial Membrane, the most common of all—Morbid Change of Structure of the Synovial Membrane, comparatively rare—Ulceration of the Cartilages—and, lastly, Scrofulous Caries of the Articulating Extremities of the Bones. Now, to jumble up these various affections under the vague term of white swelling, must be, in the first place, unphilosophic, and, in the second, unsafe; because it leads us to employ a farrago of remedies indiscriminately in all cases, in some of which they are useless, and in others may be worse. This censure, however, is not fairly applicable to the Memoir of Dr. Nicolai; for, although he makes use of the objectionable term, he confines it to a particular affection, originating *external* to the joints, and which has never been described, as far as we know, by other authors.

The Doctor divides the "true white-swelling" into the acute and chronic forms, of which the latter appears to be the most common. It presents, according to our author, three tolerably well-marked stages, each characterized by different symptoms, and having different anatomical characters on dissection.

1st Stage. The disease commences by a sensation of lassitude in the limb, and pain in the joint, increased on motion. The pains shift their seat, and are compared to what young persons commonly call "growing pains." The pain is not increased, but rather relieved, by pressure and ligatures around the joint. After a time, the lassitude and pain on motion become augmented, particularly in bed, preventing sleep, and giving the patient much uneasiness. On examination, there is seen no tumefaction, no discolouration, but the temperature of the surface is somewhat raised, and there is a kind of crepitus distinguishable in the joint. The patient, on inquiry, will very frequently be found to have suffered from *rheumatic pains*.

2d Stage. After the above symptoms have persisted for some weeks, the joint begins to swell, particularly at the point where the greatest pain was experienced. The swelling is soft, elastic, and gradually extends to the whole joint, whilst the skin becomes stretched and shining, and motion is painful and difficult. The pain is now severe, and, when the knee is the part affected, it is felt particularly in the ham, obliging the patient to keep the leg constantly bent. The enlargement goes on increasing, the veins become distended, and the limb emaciates greatly.

3d Stage. The tumefaction having reached its highest degree, the skin reddens at different points, where it becomes prominent and thin, whilst, at the same time, an indistinct fluctuation is apparent. The limb grows œdematous, and, where the pain is most severe, if an opening is made with a lancet, or ulceration takes place, a bloody puriform fluid is evacuated. If a probe be introduced, the bone, tendon, or ligaments, are found exposed, and the instrument passes with facility in any direction, showing that the parts which surround or compose the joint are destroyed, or perforated with

* The Essay was written in Latin, and crowned by the "CERCLE MEDICAL" of Paris.

sinuses. Hectic is now fairly established, and if the disease be allowed to remain, the patient gradually sinks.

So much for the symptoms of "white-swelling," let us now look at the pathology. In the first stage of the disease, we are informed by Dr. Nicolai that the cellular tissue surrounding the tendons and ligaments is loaded with blood-vessels, thickened, and infiltrated with a great quantity of a mucous or "glutinous" matter, which matter is principally deposited immediately around the tendons and ligaments. In the knee, this coagulable lymph, or whatever else it may be, is principally seated at the posterior part of the articulation, at least in the first instance; in the hip, it exists at the lateral and posterior parts of the joint, and, in the foot, at the side of the malleoli. The deep parts of the articulation have, as yet, experienced little change, save that the periosteum and synovial membrane are injected in parts, whilst the latter is altered in consistence, and adherent to the mass of lymph investing the ligaments on its outside.

In the *second stage*, the vascular condition of the cellular tissue has disappeared, and the latter structure has become converted into a fibrous, lardaceous substance, intersected by white striæ, which, on examination, are found to be made up of enlarged vessels, mostly obliterated, and so thin in their coats as to resemble veins. This fibrous substance envelops the ligaments, &c. but it can be readily peeled from them, leaving them in their natural condition, and "proving that the original site of white-swelling is in the cellular texture." Some few points again are much more vascular, of a blackish red colour, and infiltrated with caseous and livid looking matter.

3d Stage. The principal vessels in the tumour are now obliterated—the skin, cellular substance, &c. are more or less disorganized—the bones, tendons, and ligaments, are enveloped in a caseous, lardaceous matter—the synovial capsule is red and thickened, and its inner surface lined with a caseous matter. When sinuses exist, they ramify through the soft parts in various directions, penetrating to, and denuding of periosteum the bones, or exposing the cartilages.

Such is the description given us of the *chronic white-swelling*; the *acute* is usually preceded by rheumatic fever—the joint is *red*, tumefied, and very painful on the slightest touch—the pain is aggravated when the patient is warm in bed—the skin is glistening and burning hot, and there may be a collection of fluid within the joint. After the lapse of a few days, the febrile symptoms diminish or disappear, the acute symptoms subside, and the disease ultimately takes on the chronic character above-described.

Our author concludes that the seat of the disease is in the cellular membrane which invests the ligaments and tendons, and connects the skin with the deeper parts—that the matter deposited in these situations is the result of chronic inflammation, being at first common lymph, afterwards more resembling gelatine, and finally, becoming organized, and constituting fibrous and lardaceous matter. This affection is more common in youth than in mature age, "in men than in women," the latter of which positions we are very much inclined to doubt. Every thing which weakens the body, whether bad health or bad diet, disposes to the disease, which is very prevalent amongst the poor, especially of Great Britain, "where they live upon oaten bread and a great many potatoes."* If the disease has reached its

* This must be alarming intelligence to the Irish, ruddy-faced and stout limbed as they look. The fact is, however, that it would be well for the poor of Great Britain, and especially the miserable wretches that people some of our agricultural districts, if they *could* get a sufficiency of the much calumniated "mealy potatoes." It is not the *kind* of food, unfortunately, but the *want* of it, that is the cause of so much disease amongst our poor.

height, it is very rarely cured, but if brought under care at the commencement, the treatment is generally successful. White-swelling is seldom or never cured without the occurrence of ankylosis, and it is to the attainment of this that we must mainly direct our efforts. Our author goes on to describe inflammation of the synovial membrane and other affections, which may be mistaken for white-swelling; he, also, gives an elaborate description of what he terms *arthrocace*, but which is nothing more than the "scrofulous caries of the bones" so ably treated of in Mr. Brodie's work. These subjects we shall pass over at once, as no novelty can possibly attach to them; but we shall take the liberty of offering a few remarks on that part of Dr. Nicolai's Memoir which appertains to what he has designated true white-swelling, and which we have so fully described.

It will be observed that the Doctor makes the disease originate not *within* the joint, but *without* it, to wit, in the cellular membrane beneath the skin, and investing the ligaments or tendons. Most certainly this is not the generally received opinion, and we are very much inclined to doubt if it be the correct one. We have seen very many cases of white-swelling, but we must confess that we never saw any where the appearances on dissection have led us to imagine that the mischief had commenced on the outside of the capsule. Most undoubtedly as the disorganization advances in the joint, whether it be erosion of the cartilage, or caries of the bone, changes do take place in the cellular tissue, but then they are only secondary, and not of that importance which Dr. Nicolai has assigned to them. In short, we believe that, in the very great majority of those chronic diseases of the joints, which almost exclusively people our hospitals, the morbid action originates, *bona fide*, in the joint, and nowhere else. In the details of symptoms with which our author has supplied us, he remarks that the patients, for the most part, have laboured under rheumatism, and this is a point to which we would especially wish to draw the attention of our readers, as we think it of considerable consequence. A sailor, whilst in the East Indies, became subject to acute rheumatism, and was obliged to return to Europe. He entered St. George's Hospital with an enlargement of the left knee, which was in a state of semi-flexion and incapable, or nearly so, of motion. There was apparently little effusion in the joint, but there was pain on pressure or motion, with a very curious crepitation, exactly resembling that produced by erosion of the cartilage, and the contact of portions of exposed bone. A great variety of remedies, local and constitutional, were employed, and, after eight or ten months, he left the Hospital very little better than when he entered it. This is not a solitary case, in fact every practitioner must have seen very many where the symptoms are barely to be distinguished from those of the more formidable affections of the joints, but where the patient almost invariably gets off with a stiff limb. Are we to suppose that the periosteum is actually altered, the cartilages destroyed, or may we not rather conclude, that the cellular tissue investing the ligaments, tendons, and synovial bag, is the seat of the rheumatic inflammation? However this may be with the *chronic* rheumatic affections of the joints, we are satisfied that in some *acute* cases, the disease does most unequivocally originate in the parts without, and spread, rapidly and fatally, to those within.

Case 1.* A prostitute, who had been subject to rheumatism, was admitted into St.

* This and the following case have been recorded in the Medical Gazette, but we had an opportunity of seeing them ourselves, and as they illustrate our remarks, we shall make no apology for briefly introducing them. The succeeding cases have not been published elsewhere.

George's Hospital, under the care of Mr. Brodie, with most extensive swelling, reaching from the upper part of the right thigh over the knee, for some little distance down the leg. The swelling was diffuse, elastic, exquisitely painful upon pressure, and of a glossy marbled white, in fact, having all the characters of rheumatic inflammation of the cellular tissue, and probably of the periosteum. At this time the knee appeared unaffected in itself, although the soft parts around it were involved in the enlargement. She had been subject to rheumatism, was leading a life of prostitution, and all this enormous swelling, and excessive pain, had appeared suddenly the day before her admission. The limb was leeches and blistered, and the mouth made sore with calomel and opium, with the effect of almost entirely dispersing the pain and swelling. However, when all promised well, symptoms of ulceration of the cartilages of the knee joint set in, and of this disease the poor creature shortly died. On dissection, the cartilages investing the condyles of the femur, the head of the tibia, and the patella, were ulcerated, and the cancelli of the bones exposed beneath. The periosteum was easily separable from the thigh-bone for some distance up, and the bone itself was vascular.

Case 2. This was as complete a tally as possible with the one we have just recorded. A washerwoman was admitted into St. George's Hospital, under the care of Mr. Keate, with precisely the same kind of diffuse swelling, extending from the upper part of the thigh, over the knee, and down the leg. There was the same excruciating pain on pressure or motion—the same elasticity—the same opaque and remarkably bloodless hue, making the limb look as if it belonged to a statue rather than a living woman. These symptoms had come on suddenly twelve days previously, and the disease ran a similar course with the preceding, save that matter formed in the cellular tissue of the ham, and was evacuated. At last the patient died, worn out by pain and hectic, and on examining her body, the cartilages of the knee-joint were found extensively ulcerated. The inflammation, however, in the cellular texture had gone on to suppuration, for the thigh-bone and its periosteum were bathed in one large sloughy abscess from condyle to trochanter.

Here, then, are two cases of rheumatic inflammation, evidently originating in the subcutaneous and deeper cellular texture, and spreading thence to the cartilages of the knee-joint, the periosteum, and the bone. If this order of things can take place, when the rheumatic inflammation is of the acute kind, why, we ask, should it not, when the action is more chronic? Rheumatism appears to have an almost exclusive *penchant* for the cellular tissue and the textures that are formed from it, viz.: the periosteum—the ligaments—the tendons—the articulating capsules, and the investing membranes, as the pericardium. Another well known law in the etiology of rheumatism, is its disposition to attack those parts which are especially exposed to atmospheric influence, and to leave those untouched which are well clothed and warmed by fat and muscle. Hence, its greater prevalence in the knee and ankle, its comparative rarity in the hip. We are willing to allow that it not unfrequently does assail the deeper structures, the pericardium, for instance, but then it is by that peculiar action of which we talk so much and know so little—metastasis. Granting then, that rheumatic inflammation has its seat in the cellular tissue, and more especially in the portions of that tissue which are most superficial and exposed, we think it extremely probable, that in the chronic enlargements of the joints *after rheumatism*, constituting the *rheumatic white-swelling*,* Dr. Nicolai's description is correct, and the disease very frequently has its *origin* external to the joint. In practice, perhaps, this may not signify very much, but then correct pathology is at all times desirable; first, because it gives more certainty to our diagnosis and prognosis, and secondly,

* We confine it to the rheumatic form, and are quite ready to allow, that even in this the synovial membrane is not unfrequently primarily affected; indeed, we think it probable, that this membrane, when not the first, is amongst the first to be attacked in the "rheumatic white-swelling."

because without it we are mere empirics, groping in the dark, and employing remedies for no reason but that others, or ourselves, have employed them before.

We now advert to the treatment recommended by Dr. Nicolai. In the inflammatory stage he applies leeches, lotions, &c. to the part, and gives saline medicines internally; when inflammation has passed away, frictions with the camphorated mercurial ointment and volatile liniments, combined with light doses of the submuriate of mercury and jalap. An aperient of this kind should be given every second day, whilst the disease is kept at bay by local abstractions of blood, blisters, or the application of the actual cautery. In the second and third stages, when there are no open ulcers, we are recommended to employ gentle pressure by bandages, straps, the empl. hyd. c. ammoniac, etc., combining with these, according to circumstances, baths, frictions, the internal use of tartarised antimony, digitalis, sarsaparilla, and a variety of other general means. As a dernier resort we must amputate, but even in this case, we are told that death is frequently the consequence.

From this it will be seen, that our author's *methodus medendi* is meagre enough. In the acute cases of rheumatic inflammation of the thigh, terminating in ulceration of the cartilages of the knee, of which we have detailed two cases, Mr. Brodie is in the habit of putting the patients, as speedily as possible, under the influence of calomel and opium. In one case, that of a page in a nobleman's family, this plan was completely successful, and, upon the whole, Mr. B. has seen more good result from it than any other. In the chronic forms, which are by far the most common, we fancy, local measures will be found most advantageous. The alternation of blisters, and the antimonial plaster, we have seen of considerable service, but caustic issues are not attended with the same advantage in these cases, as in the true idiopathic ulceration of the cartilages. The application of the moxa is of use, particularly in the after stages, where there is rigidity of the tendons, &c., and we believe it will be found that caustic issues are of service, when the disease is in the deep-seated structures—the moxa, when it has its seat in the more superficial textures. Perfect rest, of course, is indispensable, and this is best obtained by means of paste-board splints, moulded to the form of the joint, and covered with wash-leather, forming a very effectual and indeed a very *neat* apparatus. There is a mode of applying pressure and preventing motion, which we have seen practised by Mr. Brodie, and which answers, in many instances, exceedingly well. It is this. The joint is enveloped with strips of adhesive plaster, and then a few turns of a stout calico roller are applied; over these, fresh strips of plaster, then more turns of the roller, and so on, forming a perfect case of bandage and strapping, which effectually checks all motion, and, by keeping the joint warm and moist with its perspiration, answers the purpose of a vapour-bath.

There is another affection of the joints, for the knowledge of which we are indebted to Mr. Brodie, although he has not as yet given any detailed account of it to the public.*

Case. Mary Moore, æt. 20, was admitted into St. George's Hospital, on the 4th April, 1827, under the care of Mr. Brodie. She stated, that about two months prior to her admission, she met with a fall upon the left elbow-joint, producing considerable blackness and some swelling, which, however, under the use of soap-liniment and bandages, gradually subsided. There was much pain, which continued but little relieved, with some swelling of the joint, and a host of anomalous symptoms.

* At page 338 of the 2d edition of Mr. Brodie's work upon the Joint's, the subject is alluded to.

On her admission, she presented the following symptoms; the joint, if any thing, swollen—the fore-arm semi-flexed—the fingers and thumb firmly contracted. There was considerable “shooting” pain in the elbow-joint, stretching down to the wrist and hand, but the principal seat of pain was on the fore-part of the joint, and appeared to be seated in the tendon of the contracted biceps muscle. The pain was brought on by attempting to bend or extend the joint, by supination and pronation, in short, by motion in any way; it was also brought on by pinching, or even lightly *tapping the skin* in the neighbourhood, and even, as she stated, by rising suddenly from her seat, or any unexpected noise, as the opening of a door. On endeavouring to straighten the finger, a regular paroxysm of hysteria was the consequence. She complained also of her hip, which was not swollen, but painful, the pain shooting down to the inside of the foot and toes. Pressing on the heel, and by that means pushing the head of the bone into the socket, gave much pain—so did any attempt at inverting the foot, whilst she could bear eversion a great deal better. Pressure upon the trochanter, or pinching the skin brought on the pain, and if the pressure was at all considerable, a kind of hysterical convulsion succeeded. If, however, at the time of making the examination, *the girl's attention was drawn off, she seemed not to suffer at all.* Her rest at nights was disturbed, but she had no hectic symptoms, nor was her appearance at all indicative of severe disease. The catamenia were irregular, and she was subject to hysterical affections.

These were the symptoms presented by the patient, and what did they indicate? ulceration of the cartilages? Certainly there were many of the characters of that disease; as, the appearance of the symptoms after the reception of a blow—the little swelling—the severe pain, shooting down the limb, and increased on motion of the joint, or pressure. There were, however, other symptoms, which gave strong reason to believe that the disease was by no means of so serious a nature. The absence of hectic—the appearance of health—the pain aggravated on merely pinching the integument, or any sudden noise—the circumstance of both the hip and elbow being affected, and the decided nervous paroxysms, led Mr. Brodie to believe that this was a case of hysteria, simulating ulceration of the cartilages. The girl was accordingly ordered tincture of valerian and vinum alois, with active purges, and the daily use of the shower-bath. In little better than a month, she was so far improved as to be made an out-patient, and a short time ago we learnt, that she had had a child, and was perfectly recovered!

Case 2. This was an instance of the same affection occurring in the knee-joint. Mary Kenrick, æt. 18, was admitted into St. George's Hospital, Nov. 14th, 1827, under the care of Mr. Brodie, labouring under the following symptoms. The joint was little swollen, exceedingly painful, and incapable of motion, at least by her own efforts, without considerable suffering. The pain did not awake her from her sleep at night, and there was a good deal on pinching the integument. The bowels were costive—the catamenia irregular—the appearance strong and lusty. Two years previously she received a blow upon the knee, which swelled, and was very painful. She was treated by caustic issues, and afterwards getting plenty of air and exercise, quite recovered. Six months prior to admission, she again received a blow, and from that instant her present symptoms had continued. She was ordered pil. alois c. myrrha, and briskly purged; subsequently she took valerian and vinum alois, and, on the 18th December, was made an out-patient, having little the matter with her.

We could detail several other cases of the same kind, but it would be unnecessary, as the above are fair samples of the affection. It occurs in unmarried hysterical females, and is no doubt very frequently mistaken, and treated for organic disease. We think, from what we have observed, that it is most common in the knee, that joint being most exposed to those little accidents and injuries, which may be said to be the exciting causes of the complaint. The symptoms very strongly resemble those of ulceration of the cartilages, but, on accurate investigation, there will be found the following points of difference between them. *In ulceration of the cartil-*

ages, the pain is worse at nights, is accompanied by startings of the limb, and wakes the patient from her sleep. In the *hysterical affection*, the pain, may prevent the patient's falling to sleep, but very seldom indeed awakes her, when asleep. In *ulceration of the cartilages*, the pain is aggravated on motion of the joint; in this, not only is it increased by motion, but even by *tapping* the integument, or any impression on the general nervous system, as a sudden noise. *Ulceration of the cartilages* is a serious disease, and the system knows that it is so, for there is ill-health, hectic, emaciation; but the hysterical affection is *not* a serious disease, and the patient is, for the most part, rather sleek and full-blooded than worn out by fever or irritation. The catamenia are generally irregular—the bowels costive, and other hysterical symptoms are mostly present, to mark the bent of the patient's constitution. There is one circumstance attending these hysterical affections of the joints which is calculated to mislead practitioners, namely, their being, for the most part, consecutive to a blow or injury. The fact is, that it is generally some cause of this kind which determines the *local* habitation of the hysterical leaven that is lurking in the constitution. (Thus, if a nervous girl be bled, she will have spasmodic twitchings of the muscles of the arm, and every symptom of wounded nerve)—if she be a young lady, wearying the muscles of her back at the harp or piano-forte, or “doomed for a certain time” every four and twenty hours, to occupy one of those modern instruments of torture, “education chairs,” the spine will probably be the part affected; and again, if the patient be in the lower walks of life, exposed to injury of various parts, those, whatever they may be, will become the seat and centre of the nervous malady. We have heard Mr. Brodie declare, that he has frequently been himself mistaken in his diagnosis of these hysterical affections of the joints, and he has seen instances, where unfortunate young ladies have been confined for years on mattresses and planes for disease of the spine, when the complaint was solely nervous, and there existed not a particle of disease in the vertebral column!

With regard to the treatment, Mr. Brodie is in the habit of making light of the disease, and diverting the attention of the patient from it. A girl, for instance, had obstinate abscesses in the groin, and was subject to hysterical fits. She was discharged the hospital, but the sores becoming worse, was re-admitted, with this proviso, that she was to have no hysterics! She never had a paroxysm. Another girl was admitted with the hysterical affection of the knee, and a few days afterwards, on asking the neighbouring patients whether she was ever awakened in the night by the pain, they declared not. Mr. Brodie commented on this as a favourable symptom in the girl's hearing, and, on his next visit, was surprised to find that the patient's near her could scarcely get a wink of sleep on account of her screams during the night! Mr. B. very quietly told the girl that he should not allow of any thing of the kind, and from that instant her nocturnal sufferings were lulled! When the menstruation is irregular, the vinum alois is useful—active purging is almost always of great service. If the patient has a languid circulation, with cold hands and feet, &c. Mr. Brodie employs the following form:—

Tinct. ferri ammon. 3j. Ammon subcarb. grs. v. Infus. quassia, Aquæ cinnamom. aa ʒvi. M. ft. haustus bis die sumendus.

The tincture of valerian is also of considerable service; and, as a local application, when the pain is at all severe, a rag, dipped in a compound of an ounce and a half of spirit of rosemary, to six ounces and a half of camphor mixture.

VI.

An Essay on the Remittent and Intermittent Diseases, including, generically Marsh Fever and Neuralgia ; comprising, under the former, various Anomalies, Obscurities, and Consequences ; and, under a new Systematic View of the latter, treating of Tic Douloureux, Sciatica, Headach, Ophthalmia, Toothach, Palsy, and many other Modes and Consequences of this Generic Disease. By JOHN MACCULLOCH, M. D. F. R. S. &c. &c. Physician in ordinary to His Royal Highness Prince Leopold of Saxe Cobourg. In two Volumes, 8vo. 1828.

IN some late numbers of this Journal, we have given a very full account of Dr. Macculloch's work on MALARIA, as the cause of the various (at least variously denominated) diseases in the two volumes now before us. It will require three or four articles to convey any thing like an analytical delineation of these volumes ; for, although it will be readily perceived that our learned author has a hobby-horse, on which he has quietly rode for more than 20 years past, pursuing the bent of his own inclinations, investigations, and meditations, yet we do not think that his speculations are all visionary, though some of them are probably seen through a coloured, if not a distorting medium. Dr. Macculloch is a great philosopher and logician—and he wishes to see all medical inquiries carried on according to the strict rules of philosophy and logic. That he is frequently a little ruffled in his temper, on finding that physicians have not generally conducted their investigations on these *beau-ideal* models, will be sufficiently apparent as we proceed. That he is sometimes pretty sharply critical—we had almost said *cynical*, will probably be inferred from the following passage in the preface to these two volumes. After telling us that science begins with conjecture and assertion—that its infancy is the reign of the imagination—that “physic is yet in that very infancy, wandering about its own fairy land”—that this science abounds in bad observation, in imaginary experience, “and even in positive *mala fides*”—“that the laws of philosophy and logic (what will Sir Gilbert Blane say to this ?) have scarcely yet found their way into it,” our author winds up with this terrible Philippic.

“The language of truth is simple and brief, but that is not the language of physic. Its words have meanings, and the same words have always the same meaning : but this is not the language of physic. The language of error is multitudinous, variable, vague and unsteady : and this is the language of physic. If there be a philosophical reader who doubts this, if there be a logician, a man accustomed to evidence, who has not read medical books, let him read even the most celebrated, and be satisfied.”

These are hard words master ! Perhaps, if the learned author had toiled, during the said 20 years, at the bedside of sickness, he would have been more merciful to his brethren. It is not in books alone that we see the most

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clashing testimonies, contradictions, and contrarieties. He who has seen most of human nature, and especially of human maladies, is most convinced of the existence of these contrarieties, and of the impossibility, in the present state of our knowledge, of reconciling them by means of philosophy and logic. We make allowance, therefore, for Dr. Macculloch, because we believe he has been in the habit of viewing things rather as they *should be*, than as they *are*. The philosopher forms an imaginary picture, in his mind, of what the order of things ought to be in this world—but when, like Parnel's hermit, he comes out among men, he discovers a terrible difference between the closet and the crowd! The disappointment of the worthy Doctor, at not finding physicians to be philosophers, brings up the rather ludicrous reminiscence of Sir Joseph Banks' disappointment, at finding certain little animals remain black, after undergoing the severe discipline of ebullition;

“Fleas are not lobsters, d—— their souls.”

Dr. M. observes that—“he who is now the philosopher in physic, is also a Pythagoras, while he does not *perceive* it.” We confess that we cannot clearly *perceive* the drift of this occult passage—nor that of the following :—“The physician is like Nebuchadnezzar—he dreams, and death is the sentence of him who cannot divine what that dream was.” We humbly propine that, when the physician dreams, he also sleeps—and we have a notion, that DEATH is not always more active when the doctor nods. But, leaving all prefatory matters aside, we come to the philosophy and logic of the work. The first of these two volumes is entirely occupied with the subjects of remittent and intermittent fevers—dysentary—and cholera. The first of these topics will afford ample materials for this article.

ORDINARY REMITTENT OR MARSH FEVER.

Dr. M. must be an extremely discontented man. He sets out by informing us that, on no disease in the whole circle, has he derived less information from books than on this. “He must labour with no small discrimination, who would, from medical works, extract any rational account of the immediate causes of the disease, or of the real condition of the system under it—who would discover any intelligible and consistent method of cure—who would even be always certain that it is of this disease, and not of contagious fever, that he is reading.” What if we were to tell Dr. M., that the causes of this fever are not always precisely of the same kind—and that this observation might apply to the conditions of the system—and, consequently, to the methods of cure! Nay, we would have little hesitation in going a step farther, and saying, that Dr. M. himself would not always be able to discriminate between marsh fever, under particular

circumstances, and contagious fever, if it do not actually take on a contagious character.

The object of our author, in this Essay, is to class together some disorders which appear to him to have been misunderstood, as well as misplaced, in relation to their causes and characters—and, consequently, whose treatment has been erroneous. At the head of this class, as the offspring of malaria, stands remittent fever—the most important link in the philosophical chain—and the cause of many other diseases. Dr. M. properly observes, that the more perfect forms of diseases, as described in books, are much more rare, in nature, than the ill-defined forms, and, hence, the unreasoning, and, indeed, the inexperienced practitioner, is daily at a loss to name or classify the multitudinous forms that present themselves to his view. It is our author's object, therefore, in this work chiefly to notice that which is obscure in itself, or least generally known, in marsh fever; thus making the Essay a kind of supplement or addition to the systematic descriptions already existing.

Although there can be no reasonable doubts, that the general cause of remittent fever, in its perfect form, is the application of malaria; yet our author acknowledges that various other causes do produce it, as heat, errors of diet, fatigue, cold, mental anxiety, &c. "But every one of these is an accessory cause of many other disorders;" and if malaria be more copiously generated, or more widely diffused, than is usually suspected, it may still be the real productive cause, where the causes above-mentioned are only auxiliaries, though the only ones that are apparent. The subject of the malaria itself has been amply discussed in a former volume, and all that he can permit himself here to say is—"that he has attempted to prove that all the fevers of any moment, which are not produced by contagion, are the effects of malaria, very often, or, perhaps, very generally, overlooked." All other fevers, arising from other causes than malaria and contagion, are comparatively trifling in number or power. Our author recognizes one exception to the rule respecting the cause of remittent fevers—namely, HABIT. It is well known that agues and remittents are sometimes reproduced, where the original cause cannot be in operation. It is probable, however, that, in all these relapses, some of the auxiliary causes have been exerting their influence on the constitution.

After some observations on the comparative susceptibilities of natives and strangers, in malarious countries, Dr. M. touches on the *time* which intervenes between the reception of the poison and the manifestation of its effects.

"If my own frequent observations show that fever may be induced within half an hour after exposure to malaria, and that a single inspiration, or the space of a very few seconds, is amply sufficient for the purpose, this is also an opinion most decidedly stated by many French and Italian physicians whose experience and acuteness will not be questioned. It is equally the opinion of other observers, not physicians, and, therefore, without the bias which might be suspected in such cases: of military, and chiefly

of naval men, whose observations have been founded on the momentary and transitory effects of a breeze of wind, and especially of a land wind blowing off to sea. In France and in Italy, to confirm this, instances are known and recorded, of labourers dying instantaneously from merely sitting or lying down on the ground, and of others who from looking into a ditch or drain, have been struck dead by that poison which, of course in a minor degree, would have merely produced a fever. Lind, also, whose authority stands high, describes the instant seizure with nausea and delirium, as many others have done; so that respecting this part of the question there needs be no dispute."

That the miasmal poison may, in certain states of uncommon concentration, be capable of producing an instantaneous, or even fatal effect on the nervous system, we do not deny; but that a regular fever is so quickly produced, we are inclined to doubt. It seems, in general, to require a certain period for concoction in the system, before fever is evolved. The extreme length of the interval next engages our author's attention, and after a minute examination of evidence, he appears to conclude, that 15 or 20 days form the utmost limit—perhaps more than the limit. Thus a ship's company became affected with remittent fever, on the coast of Africa—the ship put to sea, but some of the men continued to fall ill with the fever till the 20th day, after which no more cases occurred. Here, too, Dr. M. says there may have been fallacy. There may have existed a foul hold, from whence the febrific miasm continued to ascend—or the fever might have become contagious. "A remittent will become, or perhaps produce, in any given individual, a contagious typhus, under confinement." But independent of this hybrid, or contingent disease, we think there are sufficient facts on record to prove, that miasmal fever may take place after a longer absence from the source of the miasm.

"Many physicians or surgeons, both English and French, have said, that even after six months, many soldiers who had been at Walcheren and had escaped the fever there, were seized with the same disease in other countries; asserting also, that the poison had remained during that time dormant in the constitution. Pym is one of those who thinks thus, and so I imagine does Blane; while Bancroft believes, that the intermittents of spring are the produce of malaria received in the previous autumn. Baumes, resembling Lind, limits the term to fourteen days; but Ferrus, coinciding with the former, relates in proof, a case of a soldier who having escaped at Walcheren, was affected with this fever six months after, on the Niemen; as there is also a case quoted in evidence, where an English regiment became attacked in the same circumstances in England, after eight months."

An objection might be readily raised to the latter fact, that a fever produced on the banks of the Niemen, may be produced by the banks of the same river. And so an English regiment serving in Spain, after the expedition to Walcheren, might very readily pick up some malaria in the former place, without any necessity for carrying it from the banks of the Scheldt. In a physiological point of view, it is difficult to conceive how a poison of this, or of any other nature, should lie dormant so long in the system. It is easier to conceive the reception of a new poison, and the production of a new disease.

Dr. M. very properly passes over, by a reference to a host of authors, the symptoms of remittent fever, both in its simple and complicated forms—together with the almost endless modifications produced by climate, epi-

demio influence, and various other causes, including differences in the miasma itself.

"But I may mention, that while an undue, and apparently a morbid secretion of bile is the most conspicuous and common local affection, producing sometimes what is emphatically called the yellow fever, so the brain and other organs, and above all, the stomach and the bowels, are often found affected by inflammations, modifying materially the symptoms, and also demanding important modifications in the practice."

In referring to systematic writers for general descriptions and local peculiarities, Dr. M. feels himself compelled to notice that characteristic symptom, whence the disease derives its name. This is the remission or diminution of the intensity of the febrile symptoms, occurring once in the 24 hours, however variable in the period of its arrival, its duration, and degree. Sometimes this remission is so slight as not to be perceived, though errors are often committed here, especially when the remission occurs in the night, or in the absence of the medical practitioner. For our own parts, we can hardly say, that we have ever seen a decidedly continuous fever. There is an evening exacerbation and morning remission in almost every case. It is hardly necessary to say, that it is by a gradual prolongation of this interval of remission, that the so called continued fever of malaria becomes an intermittent—and this leads our author to speak of the terminations of the disease. There is, no doubt, a disposition in most fevers to resolve on certain days termed critical, though these are now but little observed.

"Three weeks may probably, however, include the much greater number of terminations in recovery, when the disease submits to the law of the critical days; while it is not uncommonly protracted to six weeks; and even in cases where its extreme mildness might have led us to expect an earlier solution."

Where this law of crisis does not seem to exist, we can assign no period for the recovery or the fatal termination. The favourable termination is often perfect, in all climates; but it not unfrequently changes to an intermittent, easily, in general, removed by proper remedies—but often peculiarly inveterate and indomitable, as those who have witnessed Walcheren, some parts of China, Greece, Italy, Spain, Moldavia, and many other countries can testify.

But remittent fever not only terminates in ague—it frequently produces, or ends in, "the local and painful affections of the nerves which may be ranked under the general term NEURALGIA." After alluding to the production of "paralytic affections," by remittent fever—or the termination of this fever in such affections, Dr. M. makes the following observations, which bear on a point of pathology, or etiology, recently mooted in one of our medical societies.

"That marsh fever does act directly, itself, or its generating poison, on the nervous system, is proved by the state of apoplexy or profound coma with which the attack is sometimes ushered in; a fact common in Italy, and known by the name of *febbre larvata*; though, in this case, mere intermittent may also be the supervening disease,

instead of remittent. That, in these fevers, the affections of this nature have been attributed to local diseases of the brain, I know; and such events may doubtless occur. But this does not explain the cases in question, where the affection of the brain is instantaneous, following directly the application of the poison, even before fever is produced, and resembling that which occurs from the application of other poisons, whether to the lungs or the stomach.

"Farther, as it is the effect of Malaria to produce the local affections of particular and single nerves, either with supervening or present palsy, or without either, while the brain is not affected, and while no local inflammation or other disease of that organ can be supposed to exist, from there having been no previous fever, it is plain that Malaria does exert a power of some kind on the nervous system directly; on the whole, or on more or fewer of its parts even to a single point in the minutest nerve."

Thus the larger paralytic affections, as hemiplegia, or paralysis of a leg or arm, consequences of an intermittent or remittent, may, he thinks, result from "direct action on the nervous system," and, in this way, he also thinks, may be explained that diminution of intellectual power, proceeding often to perfect idiotism, which sometimes follows long-continued intermittents. Dr. M. admits, however, (what we think is the more probable solution) that there may, in such cases, be organic diseases in the brain itself, the produce of local inflammation there. He does not consider this, indeed, as the more common source of the paralytic or cerebral affection.

"But if malaria does produce direct apoplexy, as it also often brings on a comatose state which is exceedingly durable, both in remittent and intermittent, and if also it produces, not only local and similar effects on single nerves, but complete hemiplegia, it will be most necessary to inquire whether some of the cases of paraplegia or other palsy, especially as occurring in certain climates and in campaigns, are not instances of the same nature; since, whether our practice in such a disorder should be different or not from the treatment of palsy produced by simple cold, the philosophy of physic cannot fail to be improved by discovering causes and assigning distinctions."

The subject of visceral or glandular disease is next taken up. Most authors have looked upon these as the effects of the fever which preceded them—though a few writers have considered the visceral affection as the primary, and the fever as the secondary link in the morbid chain. Dr M. appears to think that both hypotheses may be occasionally right. Thus, some physicians have maintained that the hepatitis of India is the direct effect of a morbidic miasm—and, if so, other glands and organs may be the primary seat of action when malaria is received.

"Thus also, through France, Italy, Sicily, every where, it is common to find, not merely single instances, but a whole population, suffering from glandular diseases in their worst forms; while no fever is present, and while also, in many cases, it seems to be ascertained that no fever has preceded, or that there has at least been no severe remittent or intermittent as the cause."

Our author concludes this chapter with an expression of his disapprobation of those wild theorists who disbelieve in contagion altogether. No doubt the great mass of fevers in this country are devoid of contagious character, because comfort and cleanliness are observed—"but to assert

that there is not such a thing as contagious fever, is to discredit evidence as numerous and incontrovertible as science or human affairs have ever produced." The fevers not contagious, he thinks, must fairly be ascribed to malaria.

The second chapter is on the chronic or relapsing, and obscure or anomalous remittent fever. This, Dr. M. observes, is a modification which is often but little noticed, while it is a source of great distress.

"If this peculiar variety is sometimes sufficiently severe and marked to be esteemed a fever, it is far from uncommon for it to be so slight as to pass for hectic, for what is called debility (a term without meaning) or for ill health, or delicate health, terms equally convenient to cloak ignorance; while not unfrequently also, it is characterized by the no less convenient phrase, nervous, or even brings on the unlucky patient the charges of hypochondriasis or affectation."

To be more particular; there is, says Dr. M. a fever not uncommon among us, to which the popular name of nervous fever is not inaptly applied, when its symptoms are not severe. Dr. Cullen was unpardonable, he says, in confounding this with contagious fever, under the name of typhus mitior. It is not contagious, nor produced by contagion, as far as his own observations have gone. "Durability, or the property of prolongation, seems to be a peculiar character of marsh fever, under all its forms; and, until an unequivocal case of contagious fever, thus mild and thus durable, is produced, I must continue to believe, that all long-continued or often-relapsing fevers belong to the disorder under consideration." The same remarks apply to what Cullen denominates synocha and synochus. By this, however, Dr. M. does not mean to deny that there can be such a thing as a pure inflammatory fever, produced by cold, or the other causes usually assigned; but he believes that the disorder so called is very frequently "a fever of the remittent family, and produced by the same causes." Many plausible arguments are adduced in favour of this position, for which we must refer to the work itself. If this "low fever"—"fever on the spirits"—"fever on the nerves," (by all which names it is known) be not a modification of remittent, our author knows not how or where it is to be classed. Physicians must erect a new genus for it—since it does not belong to one or other of the two leading classes.

"And it is far from unimportant that this point should be clearly understood; as it is only thus that our practice can be justly regulated: while it is most certain, that by mistaking it for other diseases, the sufferings of the patients have often been, and are daily and everywhere, materially aggravated. And if the cause, the original one, be Malaria, as in the case of acknowledged remittent, whatever the causes of the relapses may be, we thus acquire the means of prevention; of which, as long as we mistake its nature, we cannot avail ourselves."

Among other arguments in support of the said position, Dr. M. adduces this one, that the disorder in question is among those habitual complaints included under the vague term "ILL HEALTH," which are the produce of low and wet situations, or of some of the soils formerly described as productive of malaria.

"Another argument is, that its relation to the marked or severe and terminating

remittent, in slenderness of symptoms and in the frequency of its recurrence, is precisely that which intermittent, equally slender and equally returning, bears to a limited and severe intermitting fever, while I may lastly add, as a proof of its cause and return, that if it is especially subject to relapses in low and wet situations, as well as indebted for its very existence to those, so it is best cured, and especially when relapsing or repeated, or chronic, by change of air; that is, by change to a drier air as it is usually termed, or, what is the fact, by removal from its causes."

Dr. Mr. thinks it probable that the disease in question, is that which Dr. Haygarth has described, in the College Transactions, as inexplicable—"a peculiar state of permanent debility, enduring even for years, and without very marked disease of any kind." Unless it be attributable to the abuse of purgation and bleeding, Dr. M. is unable to account for this complaint, except by assigning some morbid exhalation from the earth as its cause. We must now allow our ingenious and indefatigable author an opportunity of describing the disease under consideration.

"This disorder may be found, and not unfrequently, with scarcely any marked symptom except mere muscular weakness; a debility on any attempt at exertion, which seems unaccountable, inasmuch as it occurs in persons, even in youth, and apparently strong, and is not very obviously accompanied by any proper febrile symptoms. At times, not even the appetite seems affected; and here, almost necessarily, the result is, to suspect the state of the patient's mind, or his moral dispositions, rather than his health; to suppose, for example, as I have often seen, that a soldier is 'shamming,' that an opulent female is indolent or affected, or a studious or professional man hypochondriacal.

"Yet, let an acute physician watch this disease, and he will be convinced that it is a disease, and moreover a fever. It commences and terminates like the remittent when best marked; and when it appears to be prolonged for months or years, as is sometimes the case, it will be easy to see that it has had intervals of cure, generally of self-cure, and relapse; and that, to each relapse, there is a period of weeks, not very uncommonly of six, while the intervals vary from one or two to any given number. Further, either the patient or the physician, or both, must be very inattentive if they do not discover that the paroxysm, of extreme debility is fixed; that it is, in fact, a paroxysm, let its length be what it may, and that there is a diurnal period when it diminishes, or where the patient, who, possibly, could not stand, on getting up in the morning, is enabled to exert, and even to enjoy himself at night.

"Hence, as to some cases, at least, the truth of, as well as the reason for, a very common remark, that midnight is the nervous patient's holiday; though there are unquestionably many cases of nervous affection, and even of periodical returns and intermissions in this complicated class of disorders, which do not appertain to a remittent type of fever, or perhaps to any fever. The particular case here quoted, is one, of course, where the paroxysm attacks in the morning and the remission is at night; but while the periods are necessarily various, so are the results, as to the complaints, appearances, or sufferings of the patient. I shall presently trace some others of the more marked of these modifications."

Between the above and the unequivocal forms of remittent fever, there are, of course, a great number of shades, in which the obscure symptoms gradually multiply and become more conspicuous, indicating, as they advance, a more severe disease. It would not be difficult, Dr. M. adds, for any attentive physician, in tolerably extensive practice, "to collect a series of cases rising in exact gradation, from the simplest debility to the most perfect form of remittent fever." The appetite, though sometimes apparently unaffected, is generally irregular or capricious—vanishing in the paroxysms.

and returning in the individuals. The tongue and the secretions will usually show indications of disorder, but none peculiar or pathognomonic. These disorders of the primæ viæ Dr. M. looks upon, of course, as *effects*, though they are generally viewed as *causes* of disease.

"In the whole catalogue of ordinary practical errors, I know few indeed more common than that which views a sluggish state of the bowels as a primary disease, sometimes also a consequence of theoretic disorders of the liver, instead of considering it what it really often is, the produce of a febrile state, belonging, either to this fever or to some other initiative and similar cause. Nor is it difficult to account for this error, vulgar as it is common; since it is the consequence, partly, of seeing, in a disorder, nothing but obvious symptoms, and partly of that empirical practice for which England is so celebrated, and which, while it tends to blind the judgment, can, from its facility, be conducted by any one."

This will not be a very palatable doctrine to the routine practitioner, and especially to the disciples of Abernethy, who have had halcyon days of it, for many years past, in consequence of the great simplicity, or rather uniformity to which practice was reduced, as a result of the doctrine that made but one cause for all disorders. We are disposed to think that the moral world will not *alone* suffer from those disturbances occasioned by the "march of intellect"—the physical world, or at least the world of physic, will come in for a share of revolution.

But to return. Our author has no hesitation in averring, that fevers of malarious origin are a very general cause of the chronic and common derangements of the digestive organs, to which so much attention has, of late years, been paid. In respect to the state of the pulse, Dr. M. justly observes that, "there are persons who cannot conceive a fever without an accelerated pulse: whereas, even in severe cases of remittent, the pulse often gives no indications of any disorder, or the very reverse of what such practitioners would have anticipated." The fact is, that in these forms of complaint, the pulse may be natural during the greater part of the day, but considerably accelerated for an hour or two, during the obscure paroxysm which marks the disorder. This often, perhaps generally, takes place in the evening or in the night, and consequently escapes the observation of the medical practitioner.

"The diseased state of mind may however exist at two distinct periods of the paroxysm and under two different states of the pulse. Under the accelerated or contracted one, it is a state of peevishness or irritability, attended by the feeling of despondency or not: or it is a modification of the great leading passion anger, which together with fear, the equally inclusive and principal passion, forms these deranged states of mind appertaining to hypochondriasis, which appear under so many modes and modifications. And if under the full and slow pulse, it is commonly simple or passive despondency, or, in extreme cases, despair, so if the opposed condition or passion, irritability or peevishness, belongs to the accelerated pulse, that, in similarly extreme cases, may amount to anger, or to a tendency to that fundamental passion, easily excited by trivial causes; not seldom, difficult to restrain, even when no external cause is applied, or proceeding to causeless conduct, even in solitude, unaccountable to the patient himself."

This symptom of mental derangement may be the only one apparent to a
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bad observer. Despair and fear, especially the latter, appertain peculiarly to the class of marsh fevers—so much so that, in some parts of the Mediterranean, when these fevers are endemic, the only name by which they are known to the common people, is *scanto*—fear or fright. This circumstance is adduced by our author as corroborating his views of the connexion between hypochondriasis and malaria. He cautions the reader, however, against concluding that he is endeavouring to draw a sweeping conclusion that all cases of hypochondriasis are dependent originally on miasmatic disorders. Dr. M. makes many judicious and ingenious observations on the effects of this slow or obscure remittent fever on the intellectual faculties, but we cannot so far disentangle them of the monstrous load of verbiage under which they lie buried, as to exhibit them here. The reader must plod and labour, and unravel for himself. The two principal mental conditions induced in this way, are torpidity and excitement.

“The state of torpidity or inability accompanies that condition which must be considered as the cold stage, or which is the commencement of the diurnal paroxysm; being noticed, of course, only when the attack commences in the day and in the hours of labour, and therefore often passing without remark. And in every fever, this is the period of peculiar mental inability; the one observation confirming the other.

“The period of excitement, or of increased, if of hurried mental power, on the other hand, is the hot fit, or that which is here its substitute; a period of partial delirium: and here also, that condition of mind which is useful in moderation, is illustrated by the other, or by that excess which causes the imagination to run wild.”

Other bodily symptoms are next investigated by Dr. M. Head-ach, though not always present, is much more common in women than in men. In the former, debility and head-ach often constitute the whole of the obvious disease. “With these symptoms alone, or apparently so, the disorder will sometimes run a course of six weeks, and with such severity as to confine the patient to bed.” To the above symptoms may be added fits of restlessness or lassitude—occasional pains in the limbs—drowsiness sometimes irresistible, and very remarkable in the chronic remittents of Italy and other malarious countries—natural sleep disturbed or irregular, being absent in the early part of the night, and coming on at the time when the patient ought to get up. The following is a curious instance of this class of disorders haunting an individual for 30 years!

“In this, the patient had, for thirty years, been subject to nearly all the diseases in rotation which I here rank under those of Malaria, namely, to remittent, to intermittent, and to almost every known variety of Neuralgia; having apparently acquired the incurable habit of these disorders at an early period of life. In several long intervals among those more marked ailments, the same person had also been affected, for long periods, with simple coma or drowsiness, and further with nocturnal awaking in the state of partial delirium just described: and it was his invariable remark, that the hour of awaking in this manner, was always precisely the same as that which marked the paroxysms of the intermittent and those of the Neuralgia, indicating their joint dependence on one cause and one habit; while that hour scarcely ever had varied by many minutes during the whole of his life of disease.”

A disordered state of the digestive organs is so inseparably connected with the complaint in question, that our author seems doubtful whether to consider it a constituent part, or a consequence of the general malady resulting from malaria.

"Let physicians watch their own cases of this disease with this new light, and they will scarcely fail to find evidences of their own which will be much more satisfactory. And they will recollect, also, when they reflect on their practice, how often they have found dyspepsia periodical under diurnal returns of various kinds, how often periodical and dependent on seasons, how often they have seen it cured by merely altering the hours of eating, how often by bark, or by arsenic, or by the other tonics that cure the remittent and intermittent diseases; and how often by change of air, as also by mental affections, or causes operating on the imagination, such, among others, as the change of physicians; all of them remedies for the intermitting diseases in question."

The author observes that, in the various works which have been written on dyspepsia, he has found no author who has taken this view of the complaint—who has looked to malaria as the cause. It is true that Dr. M. is original in making miasma so prominent a cause of dyspepsia, but if he will examine the works of authors again, he will find that "*impure air*"—which surely must be synonymous with *malaria*, has not been overlooked in the etiology of dyspepsia.* But malaria is only one of the thousand *physical* causes which disorder the digestive functions—and for one physical cause of this disorder, there are, at least, two moral causes! It is but fair to say that Dr. M. considers the catalogue of real causes of dyspepsia too long for insertion in his work.

"Of the very numerous real causes of this common disease, I cannot pretend to give even a catalogue, as that would be to transgress my plan; nor could I therefore enter upon any comparative view of the predominance of these several causes, or attempt to suggest what place the one here proposed may deserve among them."

Hysteria is considered as one of the symptoms attending this class of complaints—"though rather an incident than a portion of the disease." In some of the more strongly marked forms, however, of the low remittent, "the occurrence of the hysterical paroxysm, which is rarely more than a fit of crying, is commonly as regularly periodical as any other portion of the disease." Dr. M. has generally observed that it attends the subsidence of the pulse, or, in other words, the termination of the excitement. It is curious, that where the disease altogether is so slight, that the patient, if courageous, bears up against it, and does not complain, this hysterical weeping or feeling, is the only part of the disease which cannot be resisted. "A long-continued attempt at exertion, or at concealment which is exertion, is, in such cases, generally followed by a hysterical affection

* While enumerating the *causes* of dyspepsia, Dr. Johnson makes the following remark:—"Where air, imbued with millions of *miasmata*, exhaled from every thing in the animal, vegetable and mineral kingdoms, is breathed, swallowed, and kept in contact with the skin, the effects are conspicuous in the shallow complexions, puny or capricious appetites, and *imperfect digestion* of the inhabitants."—5th Ed. p. 53.

unusually severe." We coincide with Dr. M. in believing that most of those recorded cases of *periodical* hysteria belong to this class.

"It is one of the effects of this remittent, particularly when chronic or habitual, to produce those general derangements of the entire health which it would be tedious and equally useless to enumerate, as they are familiar to every one; while, with that, the temper, and even the moral character, as it may be considered, become also permanently or habitually injured."

Among the symptoms or consequences of the obscure malarious disorder now under consideration, we must not pass unnoticed those menstrual errors generally presented in the shape of amenorrhœa and dysmenorrhœa, the former particularly being often attended by a chlorosis that is mistaken for an original disease. We agree with our author that these complaints of the uterine system are "much more commonly the results of some derangement of the health than the sources of that ill-health by which they are accompanied."

Dr. M. has hazarded an opinion, that the climacteric disease, described by Sir Henry Hallford, is a form of this chronic and obscure malarious malady. His arguments and illustrations will be found between pages 105 and 108.

The original cause of this class of complaints, is, of course, the malaria so ably investigated in a preceding volume.

"Besides this original cause of all the evil, however, numerous other causes inducing debility will reproduce the relapse, and thus tend to perpetuate the disease; and the more readily as it is a more confirmed habit. Such are ordinary cold, fatigue, intoxication, bleeding, the excessive use of saline purgatives, mental affections, with others unnecessary to name; all of them equally efficacious in recalling the returns of a chronic tertian or quartan. Of all those causes, I would particularly notice here the use of purging, and mental affections; as, respecting the other, no one doubts much, and as they are commonly avoided. That what is called 'a course of salts' will very often reproduce an attack, I have abundant proof; and it is especially necessary to notice this, since it is commonly resorted to as a remedy for the imagined diseases to which the symptoms of this fever equally belong. Hence the frequently injurious effects of that fashionable folly, the frequenting of mineral wells; a practice resorted to by presumptuous patients, or by vulgar practitioners, as if it must be universally salutary, and was incapable of doing harm. And the common error in this case, as it is the especial cause of this erroneous and pernicious practice, is the mistaking the derangements which I formerly noticed for dyspepsia, as it is called, or liver complaints, or whatever else, under this received phraseology which is now so current; while the empirical practice to which I then alluded is applied without examination."

The existence of local pains in this class of complaints often induces to blood-letting, which generally aggravates the symptoms it was meant to relieve, besides protracting their duration.

"As to the influence of mental affections, it is rather a matter of curiosity than use, as the injurious occurrence of these can scarcely be guarded against; but it is, in the philosophy of physic, an interesting fact to observe, how instantaneously sudden grief, fear, disappointment, or other strongly depressing passions, will bring on that relapse which will generally run the same course as all the preceding."

Dr. M. remarks that, although this obvious disease has been so much over-looked, he has no doubt that it will shortly appear very common, now

that it is distinctly pointed out. England has, till very lately, been so free from intermittent fevers (which form the readiest road to the analysis of the present disease) that but a few, proportionally, of medical men, have seen an ague at all. Hence, too, their attention has been but little directed to the investigation of malaria, as its source. There can be no doubt also, that in numerous instances, fevers resulting from miasmata have been confounded with typhus.

PROXIMATE CAUSE OF MARSH FEVER.

Our satirical author remarks that, it would be well if the professor, who spends months in exciting the wonder and applause of a juvenile audience with phraseology which he does not himself understand, would substitute for all this waste of words and time, the confession of his own ignorance. "For never yet has philosophy thriven by dressing up fiction and vain speculation in the garb of truth and sense. Physic knows not how the poison of fever acts, nor on what it acts—what are the preliminary effects which produce the symptoms that are obvious to our senses." We cannot, he says, even conjecture why these actions should cease—why they should be renewed—or why they should cease to be renewed. But, although Dr. M. can offer no theory of his own, he takes leave to criticise those of others. Dr. Clutterbuck's doctrine of cerebral inflammation he passes over. The action of malaria, say the French, is stimulant, and the symptoms of debility which succeed, are the effects of previous exhaustion. On this the following remark is made.

"If indeed the action of prussic acid, or lightning, or a cannon shot, is sthenic, then the assertion will not be disputed: and thus, he who, under the action of malaria, falls down instantaneously with apoplexy, has died of over-excitement."

The fever of marshes, say others, is a GASTRO-ENTERITE, or inflammation of the mucous membrane of the stomach or bowels—and every other effect and symptom is sympathetic or consequential—and the success of the practice is said to be confirmative of the theory. Dr. M. loudly protests against this exclusive theory; but he only adduces those arguments, which others, as well as ourselves, have repeatedly brought forward against the *abuse* of the doctrine. "Whatever dissections have taught, they have not taught us the cause of marsh fever." "They have taught us, that certain effects take place occasionally:—that is their use." The inflammations are effects not causes. Dr. M. admits the periodicity of inflammation in certain agues and neuralgias, but contends that these inflammations are not common, but specific inflammations; *sui generis*—and the circumstance of their being cured by bark and arsenic, proves them to be so. It is hardly necessary, after these observations, to say that our author gives up, in despair, any attempt at a proximate cause of the disease under review.

TREATMENT.

Dr. M. sets out by renouncing all idea of the treatment of remittent fever, as it appears in tropical climates, or in aggravated forms in any climate. "The most opposite opinions have been entertained, and the most opposite practices followed. As happens in tetanus, all these modes have failed—all these modes have seemed to succeed."

"The conclusion of him who knows nothing of physic, will probably be that the imagined remedies have had no concern in the cures, though he will scarcely conclude that they have had none in the ill success; while a fatalist in medicine, as fatalists there are, will perhaps determine, that the efforts of the physician are nugatory as to either event."

Dr. M. touches on the administration of emetics, at the very beginning of a remittent, with the view of "putting it out." He does not seem to have much confidence in such a procedure, and thinks that it often produces or aggravates that peculiar inflammation of the stomach, which accompanies the fever. "How often death has been the result of such emetics, given improperly or pushed too far, is well known." The general antiphlogistic measures necessary in the early stages of fever are passed over, as universally agreed upon. In respect to purgatives, Dr. M. makes some judicious observations. Where bleeding and antiphlogistic measures are proper, the saline purgatives, by producing watery motions, lessen the whole circulating mass—and are thus useful; but where the disease will not bear, or does not require sanguineous depletion, the said saline purgatives, are improper, as tending to induce debility. Those resinous purgatives, however, which act locally, as wine, and merely promote the natural evacuations, are beneficial in all fevers, and almost all stages of fevers. On calomel, Dr. M. also makes some comments. In the remittents of hot climates, he has no reason to doubt its efficacy—in the milder fevers of our own country, he does not suppose that it exerts any specific influence "beyond such as is derived from its power over the biliary system." In regard to the chronic or relapsing variety, to which our author appears to have paid much attention, the following observations are deserving of notice, especially as they come from "one of those physicians who consider that this medicine (calomel) has been greatly abused."

"This remark is, that in the relapsing disorder, even if the attack should occur at the end of winter, in patients free from all suspicion of deranged liver or biliary affections, and when not the slightest indications of these can be traced, and when, further, the relapse may be the twentieth or fortieth to that patient, the operation of calomel is to produce obvious effects, which, if I need not specify them, physicians know well to be those which never occur except under derangement of this secretion. And at the same time, what is the important point here, it will be found that after every such effect of the medicine, the force of the disease diminishes, and that whenever the natural secretions recur, that particular relapse is about to terminate. Hence, therefore, I am led to consider, that even where it is least suspected, and indeed not to be believed present,

there is often, in the chronic relapses, a derangement of the biliary functions; and that calomel, being the remedy for these, is apparently a remedy which cuts short or cures that relapse."

The use of the medicine is recommended as long as it is found to produce the evacuation of morbid bile:—when this disappears, the calomel becomes injurious.

On sudorifics, opium, cold affusion, and diet, some observations are made that do not require notice. Dr. M. very properly remarks, that food should never be given, however light, except in the intermissions or remissions. At all other times, even in the most mild and chronic remittent, it does much mischief by ruffling or irritating the stomach.

The grand point or question is that of administering tonics—and more especially bark, in this class of diseases. Dr. M. acknowledges that this is "a complicated question." There can be no doubt that there are instances where bark fails, or even aggravates the disease, even where no inflammatory symptoms are present. But, on the other hand, there are far more instances on record, where bark has cured the disease, during the actual and unequivocal existence of inflammatory action.

"It is as painful to a writer to leave his readers in suspense on points so essential as it would be presumptuous to decide; yet it may be suggested, that if, as will hereafter appear, the inflammatory affections of remittent are of a peculiar character, and not proper phlegmasiæ, and if certain visible and demonstrable ones are actually cured by this remedy and aggravated by evacuants, the question will not improbably be decided in favour of those who recommend it in all cases; and it may not be difficult then to discover that prejudice or incorrect observation will explain that testimony against it which has been thought to be derived from experience."

No doubt exists as to the utility of bark, where there are intermissions—or even pretty fair remissions, with general symptoms of debility. The very circumstance of there being a tendency to remission or intermission in a fever, is in favour of the utility of tonics, when not strongly contra-indicated by local phlogosis.

On the subject of wine, Dr. M. entertains some eccentric, or at least heterodox opinions. Is it proved, says he, that "wine increases inflammation, when existing, or produces a tendency to it in healthy subjects, or in diseased ones?" He asks whether these opinions are grounded on observation, or only hereditary dogmas "established no one knows why, and followed because they have been followed."

"But, granting that there are cases of inflammation, or a species of inflammation which wine would increase, physicians know full well that they are utterly ignorant of the real distinctions among inflammations which, to the sense or the eye, may appear the same; and that while there are some kinds or varieties which are to be cured by stimulants both local and general, as I shall hereafter show very fully, so are there inflammations, and apparently inflammatory states of the entire system with increase of circulation, where wine is a remedy instead of being injurious. Nor does it appear that the habitual use of wine produces a tendency to inflammation in healthy subjects; since it is notorious that among water-drinkers, the diseases of active inflammation are most frequent and require the most energetic treatment."

The remarks on blood-letting need not detain us. In robust subjects—at the first attack of the disease—the loss of blood is often useful in reducing that activity of the circulation, or that vigour generally, which renders the first portion of the paroxysm severe. When, also, there is unequivocal evidence of topical inflammation, we ought to have recourse to topical depletion. But, we need hardly say that Dr. M. is not among those physicians or surgeons who conceive that fever can be “put out” by venesection, however decisive, and however early employed.

“Were I indeed to indulge in that violence of generalization so usual with physicians, and so much too prevalent among those who undertake to point out or review a system of practice, it would be to assert that it were better that blood-letting should be utterly abolished in this fever, than that it should hold a place so egregiously abused.”

From *VENESECTION* Dr. M. makes a rapid transition to *WINE*, the use of which in fever, says he, is “too often made a question of fashion and temper, rather than of rational and *sober* inquiry.” How can we expect *sober* inquiry where wine is the topic? The following short quotation is all that is necessary on this point.

“That its singular combination of stimulant and sedative powers renders it one of the most convenient of the remedies generally classed under the vague term of tonics, seems to have been established by experience that can hardly be disputed; and the most determined theorist can scarcely deny to himself, that he has gained decided advantages from its use in the low or later stages of fever, and that it has often appeared to him the means of at least supporting the patient to a favourable termination.”

Dr. M. after some remarks on subordinate agents in the treatment of fever, comes to the management of those milder varieties which he has described at such length in the volume before us. The following sarcastic observation is not destitute of foundation in truth—nor is it inapplicable to the *routine* practice of the day.

“A sweeping conclusion as to the ordinary simple fever of this character would be, that it requires no remedies at all; and most assuredly, it is far better left to its own operations, or to nature, as the phrase is, than that it should be tampered with by intermeddling and routine practitioners. There is little good to be done by remedies; but it is not so as to the harm. Left to itself, its periods proceed in a very orderly manner to a favourable conclusion; but it is rarely so when a busy or active practice interferes. What the evils to be produced may be, can so easily be concluded from the preceding remarks, that I need not detail them.”

A great deal of this routine and injurious *POLYPHARMACY* depends more on the wretched and distracted *system* of medical practice and education in this country, than on erroneous views of disease. The medical man's *time* is his only fortune. Chronic diseases occupy far more of this valuable property than acute diseases; and as the general practitioner is not allowed to charge for his visits and his *advice*, he must necessarily send medicine in such proportion as will remunerate him for his *time*. Even when the

physician or surgeon is called in, he must, as a matter of conscience, prescribe in the manner that repays the general practitioner for his attendance. He cannot, and indeed he ought not, to do otherwise—for, let it be remembered, that we are not to ruin ourselves for the sake of that public which persists in withholding from the profession the *proper mode* of remuneration. A patient will pay *only* for medicine—he considers the skill which directs that medicine as not deserving of any pecuniary remuneration. In God's name, then, let him have medicine—usque ad nauseam! The perversity of human nature, on this point, is really astonishing. The conscientious medical man, when he does not see clearly his way, and where no evident indication is to be fulfilled, would prescribe mere placebos—the common saline draught or camphor julep, which can do no harm, and by which he is remunerated for watching the disease. But the public is now got too enlightened to be put off with placebos. They must, forsooth, have medicines that will produce some ostensible *effect*, or no value is attached to the prescription! Assafoetida and camphor won't do. No! They must have something that will purge them, sweat them, make them sick, give or take away the appetite—in short, something that does violence to the constitution, or else the physician is an old woman, and the surgeon is picking their pockets by cramming down their throats a quantity of medicine, “which does them no good.” Every medical man in *actual practice*—that is, who does not practise in the garret, with the grey-goose quill—can vouch for the truth of these observations. The natural and the inevitable consequence of such a state of things is, that all classes of medical practitioners are led into a system of prescribing *active* medicines, in *chronic diseases*, instead of managing the said complaints by a system of dietetics and general hygiene, that would be of far more use than medicine. Nothing but a general and consentaneous impulse and co-operation among medical practitioners can effect a change in this system, *at present*; though we are confident that reason and common sense will, sooner or later, correct the evil. A common *consent* or co-operation among medical men can hardly be expected, for some time to come, since the prevailing mania of the day is any thing but *concord*. Into whatever circle of society a medical man now goes, the common remark which he hears is—“what a *row* there is among the doctors!” In short, the medical profession is becoming the bye-word of derision among all the more enlightened classes, and we predict that the day is not far distant, when they will go in “sack-cloth and ashes,” for their stupidity in being led away from the dignified paths of science into the arena of scurrility and personal abuse. But to return from this digression.

Dr. M. does not mean to say that the disorder in question should be ab-

solutely left to itself—he only cautions against heroic remedies. *Quietude* is considered an important measure.

“Thus when the whole visible paroxysm is nothing but a muscular debility which, with care and rest, would have been limited to a few hours, an exertion through that time will not only protract it through a considerable interval, but also produce other symptoms and greater inconveniences: such as, increase of pulse, headach, additional loss of appetite, and an augmented sense of general suffering. The same consequences also follow from mental exertion under the same circumstances; and if I need not repeat what I formerly said respecting sleep, it is plain that the reasoning is the same. In all these cases, that indulgence to the feelings or caprices of the patient which humanity ought to dictate, is also correct medical practice; much too often, however, controlled by the ascetic principle on one side, and by that of what, for want of a better term, I may call tyranny on the other.”

The bowels should be kept as near a state of nature as possible, avoiding purgation, except where there are evident indications of morbid secretions or biliary derangement. “In this moderate fever, also, if wine is not absolutely necessary, it is always convenient or useful.” There is one state, however, where active practice is necessary. It is by no means unusual for this anomalous disorder of health to take on a decidedly intermittent form, and then bark or arsenic is necessary, and is generally exhibited at once—thus terminating, in a few days, a series of teasing symptoms, or a condition of dubious convalescence, which might otherwise have dragged on for a long time. It is in this class of disorders that a sudden cure is often effected by change of habits, or rather change of air, especially where the original cause is malaria. Dr. M. asserts, and probably with some foundation in truth, that the routine practitioner not unfrequently hits on the real cure, without knowing what the disease is; and, while he is prescribing for mere debility, which is only a symptom or consequence of the disease, he gives the patient a certain number of bark draughts, for recruiting his strength, and this medicine strikes at the root of the disease, which is a veritable though obscure *remittent*. After giving vent to a severe philippic against writers and practitioners who have failed to remark (though we beg to say that they have not all failed to remark) the frequent termination of common continued fevers by an intermittent form, Dr. M. observes as follows:

“And if this particular fact, or the subsidence of a continuous fever to health through the intervention of an intermittent type, occurs very commonly in even the minor fevers, be their duration but a few days, or even one or two, then will it become additionally probable that even these fevers, be their technical names, or their imaginary causes, what they may, are dependent on the same cause as that which produces intermittents, or that they are true marsh or remittent fevers; since this is one of the essential and remarkable characters of remittent fever in its most unquestioned form. And if this particular mode of termination or evanescence never occurs in the fevers of contagion, or in the true typhus, which, from all my reading and observation is the fact, then is it at least proved, or rendered highly probable, that these minor fevers do not belong to typhus, however physicians may still determine to persist in referring them to the several doubtful or imaginary causes formerly discussed.”

The great remedy, in all cases of obstinacy or relapse, is change of air. of habits, and of scene. Hence travelling, which combines all these, is equal to them all. In respect to medicine, the catalogue is small. The

bowels should be regulated by the mildest means—the diet should be nutritious and plain—and light bitter tonics should be exhibited to improve the digestive process. These means would do more than all the farrago of drugs in Apothecaries' Hall.

We are so convinced of the fact, that a great number of disorders of the general health result from bad air, that we have taken great pains to concentrate Dr. Macculloch's views, and diffuse them widely through the profession. They are calculated to do much good, though some of them may have been carried too far. In succeeding articles we will take up the other subjects treated of in these volumes, and hope to render them still more interesting than the present—which, however, forms an indispensable preliminary to the investigation of malarious diseases generally.

VII.

Observations on the Peripneumonia of Children. By THOMAS CUMING, M.D.
Assistant Physician to the Institution for Diseases of Children, &c.

[Dublin Transactions, Vol. V.]

THERE are few, if any, diseases to which children are more liable, or which prove more fatal, if not timely remedied, than peripneumony. The situation which Dr. Cuming holds enables him to come before the public with ample materials resulting from personal observation, and of these materials we propose to exhibit the more important portions in this article.

In the dissections given by Cheyne and Hastings, the morbid appearances were chiefly confined to the lining membrane of the bronchia; whereas in almost every fatal case, our author found the parenchymatous and mucous tissues equally the seat of inflammatory action. Although the disease occurs at all ages, from a few days to eight or nine years, the most frequent subjects of attack, however, are children between nine months and two years—probably owing to the period of dentition. This disease occurring in children above two years of age, has generally been traced as a sequela of measles or hooping-cough. In some instances, the disease comes on very suddenly. The child goes to bed well, and rises next morning with all the symptoms of well-marked pneumonia. This, however is rare.

“In general a trifling cough, with other slight symptoms of catarrh, precedes by a day or two the complete formation of the disease. When fully formed, the symptoms by which the disease is characterized are a hurried, laborious, and wheezing respiration; a frequent, short, and dry cough, and a greater or less degree of fever. With the fever are combined an extreme degree of restlessness and impatience, moaning, starting out of sleep, and aversion to be moved. The countenance, though

occasionally flushed, is for the most part extremely pallid, sometimes sallow; and as the disease advances it frequently assumes a mottled livid hue, and becomes in some cases swollen and oedematous. When the progress of the malady cannot be stopped, the breathing becomes more hurried and laboured, and the wheezing amounts in many cases to rattling. A state of drowsiness and prostration succeeds to the state of restlessness and pervigilium, which had existed in the beginning; the cough is suspended; the pulse becomes imperceptible; the extremities cold; and in the course of eight or ten days from the commencement of the attack, death generally takes place by suffocation."

The average frequency of natural respiration in children under twelve months, is about 30 in the minute. Dr. C. has often observed it up to 60, 80, 90, or even 100 in the same time. When the respiration comes down from the above to 50 or 40, it indicates recovery. There is sometimes an intermission or irregularity in the breathing. That the breathing is laborious may readily be inferred, from the heaving of the chest, and the dilatation and contraction of the *alæ nasi*—symptoms that are never absent when the breath is oppressed. In some instances, towards the close of the disease, the head is violently retracted, while the lower jaw is depressed at each inspiration, and the patient lies, for a considerable time, with his mouth open, and gasping for breath, before death closes the scene.

"The respiration, though generally wheezing, is not always so. In some cases there is no wheezing at any period of the disease, and in others, though the breathing is loud and audible, the sound seems to proceed rather from some impediment offered to the air in its passage through the nostrils, than from mucous accumulation in the bronchia. It is difficult by description to convey an accurate idea of the sound to which I allude. I would call it a *dry* sound, in contradistinction to the other, which may be termed *humid*. It seems to be owing to a straitening of the air-passages, occasioned by the inflammatory turgescence of the membrane by which they are lined. When secretion takes place, this turgescence is in a great degree removed, and then the sound, from being dry, becomes moist and wheezing.

"In some instances the sound emitted in respiration seems to be a compound of the two sounds already mentioned, and to proceed, partly from nasal, and partly from bronchial obstruction. In the great majority of instances, however, the sound is distinctly wheezing, varying in degree from that of simple crepitus up to the loud and mucous rattle."

The cough, which is generally short and dry, is most frequent at the beginning, and becomes less so as the disease advances. Towards the close, it is occasionally suspended altogether. A return of cough after

* "The sound here described, though in most cases abundantly evident to the naked ear, is heard with much more distinctness when we have recourse to the employment of the stethoscope. By means of this instrument we are also enabled to ascertain whether the inflammation is confined to the mucous membrane; for when the substance of the lung is affected, this is sufficiently indicated by the indistinctness or absence of the respiratory murmur in that portion which is the seat of disease. If in the exposition which I have given of the symptoms of this disease I have not mentioned the stethoscope, my omitting to do so has not arisen from any want of confidence in the indications afforded by this instrument, the value of which I can duly appreciate, but solely because I have not yet attained to that precision in its use which would justify me in speaking of it as a *means* of diagnosis."

such suspension is to be considered a good sign. Young children swallow the expectoration, of course. The fever attending this disease runs extremely high.

"Intense heat of skin, dryness of the lips and nostrils, loaded white tongue, excessive thirst, and a pulse from 168 to 200, have been present in many instances; and to these symptoms, as I have already mentioned, have been superadded restlessness and jactitation, with moaning and starting out of sleep. In some cases the child can only be tranquillized by being carried about in his nurse's arms. As soon as he is laid on her knee, or in his cradle, the restlessness and crying will return, and continue until he is again put in motion."

The pulse, at the beginning, is generally hard, and sometimes full—during its progress it becomes more feeble—and towards the close, is usually imperceptible. Though the stomach is occasionally irritable at the commencement, it is often very difficult to produce vomiting towards the termination. This insensibility to the action of emetics has also been observed in croup. The same insensibility extends to the skin, and blisters often fail in exciting inflammation. The bowels are sometimes confined—at others, relaxed, with thin, green, slimy stools.

"I have mentioned that the countenance, though for the most part pallid, becomes more or less of a livid hue as the disease advances. The lividity is most remarkable in the lips and cheeks, but sometimes the palpebræ display a purplish, arborescent appearance, and the veins of the forehead are turgid with blood."

So far the description applies to cases that go on to a fatal termination. Let us see what is the series in more favourable cases. The cough becomes less frequent, and more loose-sounding—the breathing less hurried and wheezing—the fever subsides—the countenance resumes its healthy expression—sleep is obtained—the fever continues so long as there is any considerable affection of the respiration.

"With regard to the duration of this disease, when an unfavourable event takes place, it is generally upon the eighth or tenth day. When the case terminates in recovery, the disease is seldom prolonged beyond a week. In most instances the convalescence can be dated from the fifth, sixth or seventh day. Sometimes after the acute symptoms have subsided, more or less of cough, with wheezing respiration, will remain, and continue perhaps for weeks, the disease thus passing into the state of chronic bronchitis."

When chronic bronchitis is of long standing the expectoration becomes puriform—emaciation and hectic set in—and the little patient dies, with many of the symptoms of phthisis. On opening the body, however, we find that the disease exists principally in the mucous membrane, the substance of the lungs being generally unaffected.

This disease is much more prevalent in Winter and Spring than in any other season. Its cause cannot always be traced; but it is usually owing to exposure to wet and cold—hence it is more prevalent among the poor than the rich.

"The morbid appearance most frequently met with is an increase in the solidity of the lung, varying in degree from that of the slightest sanguineous congestion up to complete hepatization. This increase of solidity or induration is not equally great in every part of the lung. The inferior and posterior portion of the lung is in

general the part principally affected ; and it frequently happens that, while the upper portion is in a healthy state, or merely a little more congested than natural, the inferior portion is completely hepatized. It would appear as if the morbid process, commencing in the lower part of the lung, had completed its course there before the superior portion had advanced beyond the stage of sanguineous congestion. By hepatization I mean that state of the lung which is characterized by a purplish red colour externally, a bright red colour and granular appearance when the lung is incised, and a total absence of crepitus, the lung feeling firm and solid, and sinking in water. This state corresponds with the second degree of inflammation of the lung, as described by Laennec. The first degree of inflammation, according to the same author, is the state of sanguineous congestion above-mentioned. Laennec's third degree of inflammation, or that which is characterised by a purulent infiltration of the lung, I have not had an opportunity of observing. When the first degree of inflammation, or that of sanguineous congestion, prevails, it is generally combined with more or less of serous effusion into the interlobular tissue of the lung ; but where the lung is hepatized its section appears dry and granular, and very little serous, or any other kind of effusion, escapes."

Along with this hepatization of lung which is *always* found after death, there is almost always more or less of inflammation observed in the mucous membrane of the bronchia—in some cases of the trachea. The more intense the inflammation of the mucous membrane, and the more considerable the effusion into the bronchia, the less general is the induration of the lungs, and *vice versa*. With regard to the abdominal viscera, besides enlargement of the mesenteric glands, and tubercular depositions in the peritoneum, the liver was sometimes found pale, in some instances congested, enlarged, and with adhesions to neighbouring parts. Dr. C. thinks it probable that the inflammation usually commences in the mucous membrane, and is propagated thence to the substance of the lungs.

The danger in this disease is always proportioned to the violence of the symptoms, and their duration before proper treatment has been employed.

"The more intense the fever, the more hurried, laborious, and wheezing the respiration, and the greater the inability to expectorate the mucus accumulated in the bronchia, the more unfavourable the prognosis, and *vice versa*. When lividity of the countenance with coma, and a weak, rapid, and intermitting pulse set in, the event is almost uniformly fatal."

It is consolatory to think that, if proper treatment be early put in force, the event will seldom be unfortunate. The fatal termination appears to be owing either to the suffocation occasioned by the accumulation of fluids in the bronchia—or to that indurated state of lung termed by Laennec hepatization, which renders the organ impermeable by the air.

The therapeutical objects would appear to our author to be threefold—*first*, to arrest the inflammation, before effusion has taken place—*secondly*, where effusion has obtained, to prevent its increase—*thirdly*, to adopt such measures as may promote absorption or expectoration.

To accomplish the first object bleeding, of course, is our sheet-anchor, and when early employed will strangle, as it were, the inflammation.

"In this early stage the breathing is loud and distinctly audible ; it is not wheez-

ing, the former sound arising from the straitening of the air passages, occasioned by the turgid state of their mucous membrane. It rarely, however, happens that our assistance is required before a certain degree of effusion has taken place, as is evinced by the wheezing of the respiration. We can seldom, therefore, expect to conduct the disease to a favourable termination, except through the medium of a free expectoration, which is, indeed, the most usual way by which the inflammation of the bronchial membrane, or of the substance of the lungs, resolves itself."

Dr. C. observes that, too much importance is often attached to the period of dentition, in the diseases of children, and the stomach and bowels are often exclusively looked to, when the lancet ought to be freely used. "It is as great a mistake to suppose that children do not bear bleeding well, as that the diseases to which they are liable do not require it." Here our author takes a very proper opportunity of questioning a dogma laid down by the present Dr. Hamilton, of Edinburgh, and who informs us that "bleeding by leeches, which some recommend in this (catarrhal fever) and other febrile affections of infancy, is, according to my experience, most injurious."* We confess we should attach exceeding little importance to the opinion of any man who could enunciate such a sweeping dogma, so repugnant to the daily observation of every practitioner in Great Britain.

The earlier the blood is drawn, the less occasion will there be for repetition—but it must be repeated till the symptoms are relieved.

"In general from two to three ounces in an infant between six and twenty months will be sufficient. In a child about two years of age from three to four ounces may be abstracted; and when the age is above four, about five, six, or eight ounces may be drawn, according to circumstances. In an infant under six months, though general blood-letting may often be required, the application of three or four leeches to the back of the hand or foot will for the most part answer the purpose, where a vein, which is frequently the case, cannot be found. It is better to apply the leeches to the hand or foot than to the thorax, for when they are applied in the latter situation, it is difficult to stop the bleeding after they have fallen off; and instances have occurred in which a fatal hæmorrhage has been the consequence of a continual oozing from four or five leech-bites. When they are applied to the hands or feet, the bleeding can easily be stopped by placing compresses of lint over the bites, and securing them, as after the operation of V. S., by a bandage. As far as my observation goes, leeches applied to the extremities are nearly as efficacious in removing local inflammation in infants, as when applied in the vicinity of the part affected. They seem to produce the effect of a general bloodletting, as the face and lips become pale, the pulse falters and syncope occasionally takes place, followed by vomiting. These effects are apt to be produced when general V. S. is carried to a considerable extent, and sometimes a state of nervous agitation and general commotion is induced, which, if not speedily removed, may terminate in death. The best remedies in a case of this kind are the horizontal position, cool air, and a drop or two of the tincture of opium."

The blood of children in this disease does not usually show the buff or cup. If it is desirable to have blood from a vein, the jugular will always supply it—generally a vein in the back of the hand. There is a point in this inflammation beyond which we dare not go on with blood-letting. When an abundant effusion has taken place into the bronchia, and when, as generally happens, this state is combined with more or less of collapse, the abstraction

* Hints for the Treatment, &c. p. 84.

of even a small quantity of blood may be attended with fatal prostration. Expectoration—free and copious expectoration, offers the only chance of success in such cases. Even local depletion is then hazardous, and blisters should be substituted. As auxiliaries to the lancet, Dr. C. places much reliance on purgatives and emetics. In the early stage, before much mucous effusion has taken place, purgation lessens the quantum of circulating fluids, by restoring the secretions from the bowels; but, as in the case of bleeding, there is a limit to their employment. Our author prefers calomel and jalap; and after the bowels are well cleared, he keeps up the action by small doses of calomel and ipecacuan (one grain of each) every second, third, or fourth hour. He has seen decided relief from an antimonial emetic, when the lungs were much oppressed.

“Though Dr. John Clarke is so apprehensive of the employment of antimonials in the diseases of children, as far as my observation goes, I think his fears are in a great degree unfounded. I have used tartar emetic in many of the acute affections of children, and even of infants; and though I have repeatedly observed its good effects, I do not recollect a case in which I had occasion to regret its employment.”*

After these remedies, blisters are to be applied; but care should be taken not to let them remain on longer than three or four hours, otherwise much irritation is produced. In infants of irritable habits, it is proper to weaken the emplastrum lyttæ, by mixing with it an equal quantity of emplastrum ceræ. In the advanced stage, when debility is great, and suffocation threatening, we must exhibit stimulants, of which, the carbonate of ammonia is the best. The decoction of seneka forms a good vehicle. When the prostration is extreme, wine and other cordials must be given, though they offer but very faint hopes of success.

Cases are minutely detailed by our author; but having portrayed his principles very fully, we need not enter on an examination of the facts on which they are founded.

* “In the peripneumonia of adults I have known the best effects to follow the administration of tartar emetic in large doses, as recommended by Laennec and other continental physicians. As the remedy, however, when so used, not unfrequently proves harsh and violent in its operation, I have been unwilling to employ it in the peripneumonia of children, except in the dose and manner above mentioned.”

VIII.

Pathological and Practical Researches on Diseases of the Brain, &c. By
JOHN ABERCROMBIE, M. D.

[APOPLEXY.]

WE do not much wonder that the ROUTINE PRACTITIONER should have as great a horror of pathological investigations, as had the Turkish Cadi of hearing two sides of a question. These Researches are admirably calculated to disturb settled opinions—to weaken fixed principles—and, in short, to engender scepticism, and undermine the foundations of medical faith. The routine practitioner has one name for each disease—one or two leading or pathognomonic symptoms—one, or, at the most, a couple of causes—but a whole magazine of remedies. In such a pleasant state of things, pathology is a most unwelcome intruder. It is like the doubt of “PROVIDENCE’S SWAY” which rose suddenly in the mind of Parnell’s hermit, and by which “all the tenor of his hopes was lost.” It is like the fragment of rock which rolls from the aerial summit of a cliff, and plunges into the tranquil lake below, whose glassy bosom, the moment before, reflected clearly and distinctly every feature of the surrounding and superincumbent scenery, celestial and terrestrial, while—

————— glittering fragments of a broken sun,
Banks, trees, and skies, in thick disorder run.

Analogous to this are the modern investigations into the connexion between outward symptoms and physical phenomena, on the one hand, and internal disorders of function, or change of structure, on the other. These investigations leave no hope that medical practitioners shall, in future, repose on beds of roses. Their confidence in a few diagnostic symptoms must be broken—their reliance on a routine administration of drugs, for the cure of diseases of which they are often ignorant, must be withdrawn, or greatly diminished—and, finally, medical men of every denomination must now study or starve! This is evidently the opinion of the distinguished author, whose work is now before us. He shows us candidly the difficulties that surround us, but urges these very difficulties as the best reasons for renewed exertions.

“In the investigation of the cases which are more properly referable to the head of apoplexy, we find the same difficulties which have met us in the inflammatory affections. A person previously in perfect health falls down suddenly, deprived of sense and motion, and dies, after lying for some time in a state of coma. We find on examination a large coagulum of blood compressing the surface of the brain, or filling its ventricles, and the phenomena of the disease appear to be distinctly accounted for. Another person is cut off with the same symptoms, and we expect to find the same appearances, but nothing is met with except serous effusion, in no great quantity, in the ventricles, or only on the surface of the brain. A third is seized in the same manner, and dies, after lying for a considerable time in a state of coma, from which nothing can rouse him for an instant; and on the most careful examination, we cannot detect in his brain the smallest deviation from the healthy structure.”

Dr. A. observes, that we have seen the same want of uniformity in regard to various other morbid conditions of the brain. "We are not, however, to sit down contented with this profession of our ignorance, but ought, on the contrary, to consider this conclusion as a position of much importance, from which we are to commence a new course of investigation." It is to be recollected, however, that in pathology, as in all other branches of medical science, we must act according to the *general results* of observation and experience—not according to the exceptions, however numerous they may be, which we meet in our investigations. Thus, in the passage which we have quoted from Dr. Abercrombie, he tells us that, in one man who dies with the usual symptoms of apoplexy, we shall find a sanguineous effusion in the head—but that, in another, we may not be able to detect any trace of physical lesion in the brain. Dr. A. however, has omitted to tell us that, in perhaps 30 cases of apoplexy, with the usual symptoms, we shall not fail once to meet with the proper physical lesions after death. If therefore, in the 31st case, we should be disappointed in our endeavours to detect the cause of the disease, we are not, on that account, to distrust the symptoms that are presented in the next patient under our care. But to proceed with our proper analytical labours.

Dr. A. tells us, that the most simple illustration of apoplexy is derived from those cases which result from mechanical causes, as tight neck-cloths, strangulation, &c.—also those cases where people fall down suddenly, in a state of perfect apoplexy, and yet speedily recover, without any remaining paralysis. In these cases, Dr. A. remarks, "the apoplectic attack must be supposed to depend upon a cause, which acts simply upon the circulating system of the brain, producing there a derangement which takes place speedily, and is often almost as speedily removed." Now here we must differ in the very outset, and on a very important point of pathology, from our talented author. Why, in the name of physiology, should not the brain, the sensorium commune, be affected through the medium of its nerves, as well as other organs? We see the heart's function violently disturbed—nay, arrested, by a moral emotion:—We also see the function of the same organ disturbed and interrupted by irritation of a nerve in the stomach or bowels. Now all this must be through the medium of the nervous system. Yet, Dr. A. does not seem disposed to admit that the functions of the brain (the centre of the nervous system) can be disturbed or interrupted, as in these cases of transient apoplexy, except through the agency of the circulation simply. In the absence of direct proof, then, we have every reason to believe that, in the cases in question (excluding strangulation, and other mechanical causes) the affection of the nervous system is the primary, as well as the principal pathological condition—and that, whatever derangement of the circulation may obtain in these sudden and transitory attacks of apoplexy, it is subsequent, secondary, or in other words, the effect of the nervous

derangement. Dr. A. indeed, acknowledges that it is very difficult to say in what this simple derangement of the circulation consists—since we have “no data upon which it can be determined by legitimate deduction.” The wise course, therefore, is to correctly ascertain those symptoms which *most generally* obtain during life, and those organic changes which most commonly correspond with them in the dead body. The exceptions to general rules should be known, and borne in mind, but they should rarely influence our conduct in the general routine of our practice. But we must proceed in our analytical labours.

Our author remarks that the apoplectic attack is generally preceded by symptoms indicative of deranged circulation in the brain, such as headach, giddiness, sense of fulness, pulsation, noise in the ears, &c. The intellectual functions sometimes evince slight aberrations, and the senses are disturbed. Transient paralyzes of certain muscles are occasionally observed, as in speech, walking, &c. The attack itself occurs under three forms, which are thus delineated by our talented author :

“I. In the first form of the attack, the patient falls down suddenly, deprived of sense and motion, and lies like a person in a deep sleep; his face generally flushed, his breathing stertorous, his pulse full, and not frequent, sometimes below the natural standard. In some cases convulsion occurs, in others rigid contraction of the muscles of the extremities; and sometimes contraction of the muscles of the one side, with relaxation of the other. In this state of profound stupor, the patient may die after various intervals, from a few minutes to several days; or he may recover perfectly, without any bad consequence of the attack remaining; or he may recover from the coma, with paralysis of one side. This paralysis may disappear in a few days, or it may subside gradually, or it may be permanent. Other functions, as the speech, may be affected in the same manner, being speedily or gradually recovered, or permanently lost; and recovery from the apoplectic attack is sometimes accompanied by loss of sight.

“II. The second form of the disease begins with a sudden attack of pain in the head; the patient becomes pale, sick, and faint; generally vomits, and frequently, though not always, falls down in a state resembling syncope; the face pale, the body cold, and the pulse very feeble. This is sometimes accompanied by slight convulsion. In other cases he does not fall down, the sudden attack of pain being only accompanied by slight and transient loss of recollection. In both cases he generally recovers in a few minutes from the first effects of the attack, is quite sensible and able to walk, but continues to complain of headach; after a certain interval, which may vary from a few minutes to several hours, he becomes oppressed, forgetful, and incoherent, and then sinks into coma, from which he never recovers. In some cases paralysis of one side occurs, but in others, and I think the greater proportion of this class, no paralysis is observed.

“III. In the third form, the patient is suddenly deprived of the power of one side of the body, and of speech, without stupor; or if the first attack be accompanied by a degree of stupor, this soon disappears; he seems sensible of his situation, and endeavours to express his feelings by signs. In the farther progress of this form of the disease great variety occurs. In some cases, it passes gradually into apoplexy, perhaps after a few hours; in others, under the proper treatment, the patient speedily and entirely recovers. In many cases the recovery is gradual, and it is only at the end of several weeks or months that the complaint is removed. In another variety, the patient recovers so far as to be able to speak indistinctly, and to walk, dragging his leg by a painful effort, and after this makes no farther improvement. He may continue in this state for years, and be cut off by a fresh attack, or may die of some other disease without any recurrence of the symptoms in his head. In a fifth variety, the patient neither recovers, nor becomes apoplectic; he is confined to bed speechless and paralytic, but in

possession of his other faculties, and dies gradually exhausted, without apoplexy, several weeks or months after the attack.

"These three forms of disease frequently pass into one another; but they are very often met with, as they are here described, forming affections which differ remarkably from each other; and they appear very naturally to arrange themselves into the three classes which have here been referred to;—first, those which are immediately and primarily apoplectic; secondly, those which begin with a sudden attack of headach, and pass gradually into apoplexy; thirdly, those which are distinguished by palsy, and loss of speech, without coma."

A section is next dedicated to a consideration of those cases that are primarily apoplectic—in which cases we find the patient sometimes speedily recover—sometimes die, presenting extravasation of blood, or effusion of serum—"in many cases no morbid appearance whatever." The latter, which Dr. A. designates as simple apoplexy, seems to him to establish the important fact, that there is "a modification of apoplexy depending upon a cause of a temporary nature, without any real injury done to the substance of the brain—that the condition upon which this attack depends, may be removed almost as speedily as it was induced—and that it may be fatal without leaving any morbid appearance in the brain." This is an undoubted fact, and Dr. Abercrombie need not have related so many cases from his own and other men's practice, to establish it. As our author assimilates this class of cases with that in which serous effusion is found, he goes on to state a series of cases of the latter description, which we shall pass over, of course, as not necessary for the pathological investigation that is to follow. We shall introduce an extract touching what has been termed serous apoplexy, and the distinction, real or imaginary, between it and sanguineous apoplexy.

"I. The distinction which has been proposed betwixt sanguineous and serous apoplexy is not supported by observation. The former is said to be distinguished by flushing of the countenance and strong pulse, and by occurring in persons in the vigour of life; the latter by paleness of the countenance and weakness of the pulse, and by affecting the aged and infirm; and much importance has been attached to this distinction, upon the ground that the practice, which is proper and necessary in the one case, would be improper or injurious in the other. I submit that this distinction is not founded upon observation; for, in point of fact, it will be found, that many of the cases which terminate by serous effusion, exhibit, in their early stages, all the symptoms which have been assigned to the sanguineous apoplexy; while many of the cases, which are accompanied by paleness of the countenance and feebleness of the pulse, will be found to be purely sanguineous; and one modification of the disease in particular will be described, in which these symptoms are very strikingly exhibited, while the disease is found to be sanguineous apoplexy in its most hopeless form. Portal has described a series of cases which afford the same result; of three, which presented all the symptoms of serous apoplexy, one was saved by repeated bleeding, and in the other two which were fatal, there was found extensive extravasation of blood. Case XC. lately described, forms a remarkable addition to these observations. If any case could be confidently considered as serous apoplexy, this was such. Dropsical effusion had existed in the body for months; and in defiance of every remedy, it had been progressively gaining ground. There were symptoms indicating its existence both in the thorax and in the abdomen; the patient then became comatose, with pale countenance, and died; but though dropsy was found in the other cavities, none could be detected in the brain.

"II. In other parts of the body, serous effusion is very seldom a primary disease; it arises as a result, either of inflammatory action, or of impeded circulation, and takes place slowly, not accumulating at once in such quantity as to induce urgent symptoms. It is, therefore, in the highest degree improbable, that it should occur in the brain as a primary disease, and accumulate with such rapidity as to produce the symptoms of an apoplectic attack.

"III. The quantity of fluid effused bears no proportion to the degree of the apoplectic symptoms. We find it in small quantity though the apoplectic symptoms had been strongly marked and long continued; we find it in large quantity when the symptoms have been slight; and, finally, we find most extensive effusion in the brain where there have been no apoplectic symptoms at all. The direct inference from these facts is, that in the cases of apoplexy with effusion, the presence of the fluid cannot be considered as the cause of the apoplectic symptoms.

"The facts which have been related in this section appear to warrant the following conclusions:

"1. There is a modification of apoplexy which is fatal, without leaving any morbid appearance that can be discovered in the brain.

2. There is another modification, in which we find serous effusion often in small quantity.

"3. The cases which are referable to these two classes are not distinguished from each other, by any such diversity of symptoms as can be supposed to indicate any essential difference in their nature.

"4. Without any apoplectic symptoms, we find serous effusion in the brain in an equal or in a greater quantity than in the cases of the second modification.

"5. It is therefore, probable, that in these cases the effusion was not the cause of the apoplectic symptoms.

"6. It is probable, that the cases of the first modification depend upon a cause which is entirely referable to a derangement of the circulation in the brain distinct from inflammation.

"7. It is probable, that the cases of the second modification are, at their commencement, of the same nature with those of the first; and that the serous effusion is to be considered as the result of that peculiar derangement of the circulation, which constitutes the state of simple apoplexy. In other words, it is probable, that the affection which has been called serous apoplexy is to be considered as simple apoplexy terminating by effusion."

Previously to entering on any speculations respecting the nature of apoplexy, we must follow our able author through some sections on practical subjects.

Cases not primarily apoplectic.—The prominent symptoms in these cases are, a sudden attack of violent headach—the patient often starting up and screaming from its severity. Sometimes he falls down pale, faint, and exhausted, occasionally with a slight convulsion, from which he recovers, in a short time, so far as to be able to walk home, the symptoms going on under various modifications—especially the headach, and sickness at stomach.

"The patient continues for some time, perhaps an hour or two, cold and feeble, with cadaverous paleness of the countenance; his pulse weak and generally frequent. He is quite sensible, but oppressed. By degrees he recovers heat and the natural appearance of the countenance, and the pulse improves in strength. The face then becomes flushed; he is more oppressed; he answers questions slowly and heavily; and at last sinks into coma, from which he never recovers. The period occupied by these changes varies exceedingly in different cases. In one case to be described, there intervened, from the first attack to the commencement of coma, 5 hours; in a second, 12 hours; in a third, 3 days; and in a fourth, not more than 15 or 20 minutes. Death followed

the appearance of coma in the first of these cases in 7 hours, in the second in 32 hours, and in the third in two days."

In Dr. A's experience, these cases are generally fatal—forming a modification remarkably different from the simple apoplectic state—"and, on inspection, we find none of those varieties and ambiguities which occur in the apoplectic cases, but uniform and extensive extravasation of blood." He thinks we are justified in concluding, that they depend upon the immediate rupture of a considerable vessel, without any previous derangement of the circulation, "the rupture arising from disease of the artery at the part which gives way."

"At the moment when the rupture occurs, there seems to be a temporary derangement of the functions of the brain, but this is soon recovered from. The circulation then goes on without interruption, until such a quantity of blood has been extravasated as is sufficient to produce coma. In their whole progress, these cases are strictly analogous to those of extravasation on the surface of the brain, from external injuries. The patient recovers from the immediate effects of the injury, walks home, and after some time, perhaps an hour or two, becomes oppressed, and at last comatose. The extravasated blood being in this case removed by the operation of trephine, the coma disappears. The varieties of the symptoms which occur in this form of the disease, are such as we might expect upon this view of the nature of the affection. In some cases it is probable that the extravasation goes on progressively, until such a quantity has been accumulated as is sufficient to produce the fatal coma. In others, there is reason to believe that soon after the rupture has taken place, the hæmorrhage is stopped by the formation of a coagulum, and after a considerable interval bursts out afresh and is fatal."

A variety of cases are here introduced by our author, in illustration of the foregoing observations. These we must pass over.

The source of the hæmorrhage, in cases of this class, is extremely various. Perhaps the most common is a rupture of a moderately sized vessel in the substance of the brain, whence the blood makes its way into the ventricles, or to the surface—or in both directions at the same time. There are cases, however, where the blood appears to spring from the minute capillary vessels, by what we might almost term exhalation. This is the meningal apoplexy of Serres, and other Continental pathologists. In some instances, the hæmorrhage has been distinctly traced to ulceration and rupture of one of the principal arterial trunks—in others, to the vessels of the choroid plexus—to rupture of the sinuses—of small aneurisms, &c.

In respect to the diseased conditions of vessels in the substance of the brain, to which Dr. A. attributes the hæmorrhage, ossification, or earthy brittleness is one. The caliber of the artery is often lessened at the hardened part—sometimes entirely obliterated.

"In other cases again, numerous branches of the principal arteries of the brain will be found to present a succession of small opaque osseous rings, separated from one another by small portions of the artery in a healthy state. This is a very common appearance in the brains of elderly people, and the rings are generally from half a line to a line in breadth, and are separated from each other by healthy portions of about the same extent. In some cases again, the inner coat of the artery is much thickened, of a soft pulpy consistence, and very easily separated; so that,

when a portion of the artery is compressed between the fingers, a considerable quantity of this pulpy matter is forced out."

Dr. A. thinks that this diseased condition is probably the cause of a variety of complaints in the head, which ultimately prove fatal by the rupture of vessels.

The Paralytic Cases. Under this head our author described cases which resembled each other in symptoms only, but were widely different in their pathology. We are not yet possessed of sufficient facts to enable us to discriminate these cases from one another, in a satisfactory manner. The leading phenomenon, in this class, is the paralytic attack without coma.

"The attack appears under various forms; the most common of which is hemiplegia with loss of speech; but in some cases the speech is not affected; while in others, the loss of speech is at first the only symptom. In some cases again, one limb only is affected, which is most commonly the arm, though sometimes the leg. Numerous other modifications occur, as, palsy of one eyelid; or of the orbicularis of the eye; distortion of the eyes; double vision; twisting of the mouth, &c. Loss of the power of swallowing also occurs occasionally, though more rarely in the cases which do not pass into apoplexy. The patient frequently appears quite sensible of his situation, and makes anxious attempts to express himself; generally understanding in a great measure what is said to him, and answering by signs. Sometimes, however, when he retains a partial power of speech, his answers are incoherent and unintelligible.

"In the farther progress of cases of this class, we observe remarkable varieties which may be chiefly referred to the following heads;

"I. Such an attack may be merely the prelude to the apoplectic, and may pass into it after a short interval. These cases belong chiefly to the second class.

"II. The attack may, under the proper treatment, pass off speedily and entirely, leaving, after a very short time, no trace of its existence.

"III. The recovery may be very gradual, the use of the affected limbs being restored after several weeks or months.

"IV. The palsy may be permanent; that is, the patient, after a certain time, may recover so far as to be able to walk about, dragging his leg with a painful effort, and to speak very imperfectly; and after this, makes no farther improvement to the end of his life, which may be protracted for many years.

"V. In a fifth variety the patient makes no recovery; he is confined to bed, speechless and paralytic, but possessed of his other faculties in a considerable degree, and dies gradually exhausted, after several weeks or months; in some cases without coma, in others with coma for a few days before death.

"In endeavouring to investigate the morbid conditions of the brain which are connected with these varieties, we find considerable diversities, which, in a pathological point of view, may be referred to the following heads:

"I. Many of the cases appear to have close analogy to simple apoplexy; and when they are fatal, present either no satisfactory appearance, or only serous effusion, often in small quantity.

"II. Extravasation of blood of small extent, contained in defined cysts in the substance of the brain or under the membranes.

"III. Ramollissement of the cerebral substance.

"IV. Inflammation and its consequences."

When a formidable paralytic attack passes off speedily and entirely without leaving any trace of disease, we may conclude that no very serious injury has been sustained by the brain, and that mere turgescence of vessels, or sympathy with some other organ, had been the pathological condition.

Many cases again are fatal, and present, on dissection, only serous effusion, often in small quantity.

"I have formerly given my reasons for believing, that serous effusion in apoplectic cases is not a primary disease, but a termination of simple apoplexy; and I have described cases in which it existed to a considerable extent without paralysis. In the cases, again, in which it has been accompanied by paralysis, the quantity of fluid has borne no proportion to the symptoms, and has been equally distributed over the brain; except in the case now quoted from Morgagni, in which too, it is worthy of remark, it appeared to be most abundant on the same side with the disease. From these considerations, I think we may conclude, that, in the cases now referred to, the effusion was not the cause of the paralysis, but the effect or the termination of a certain state of the circulation in a part of the brain, with which the paralysis had been connected from the first invasion of the disease. The whole phenomena of palsy, do indeed bear evidence, that certain cases of it depend upon a cause, which is of a temporary nature, and capable of being very speedily and entirely removed. We see hemiplegia take place in the highest degree, and yet very rapidly disappear; but the most singular circumstance, connected with certain cases of palsy, is, that we occasionally see it continue without any improvement for many weeks or months; and then, from some change which entirely eludes our observation, take a turn for the better, and very suddenly disappear."

In respect to paralytic cases dependent on extravasations of blood in the brain, we find that, when the cerebral substance surrounding the clot continues in a healthy state, the coagulum, even of large size, will be gradually and completely absorbed in time. The process of absorption commences soon, but goes on very slowly. In fourteen or fifteen days from the extravasation, the character of the coagulum is considerably changed. The thinner parts have disappeared, and the remainder has become firmer in texture. At last it assumes the appearance of a fibrous texture—the dark red colour disappears, and a small mass of fibrine only remains. Even this, in process of time, almost entirely vanishes.

"While these changes are going on in the coagulum, the cavity in which it is contained becomes lined with a distinct firm membrane of a yellowish colour; and when the coagulum has entirely disappeared, we find the cyst remaining, and forming a distinct and well defined cavity, which is generally entirely empty. Bands of the same yellow matter which forms it are frequently seen crossing it in various directions, and producing a connexion betwixt its opposite sides at these points. The French writers believe that the cyst is at last entirely obliterated; but I have never seen any thing to satisfy me that it is so. I have examined such cysts at various periods of their progress, but have seen nothing like an approach to obliteration, except the bands which I have now mentioned, connecting their opposite sides. The cyst appears to be distinctly organized, and numerous bloodvessels have sometimes been observed ramifying upon it."

As the absorption goes on, the symptoms, in some cases, gradually subside and entirely disappear—but in others, the improvement is but partial, and the coagulum is sometimes removed, the paralysis remaining for life. In some, the symptoms appear to go off speedily, though there is every reason to believe that the coagulum remained unabsorbed.

Softening of the Brain. Dr. Abercrombie recurs to this subject, and endeavours to corroborate the conjecture previously offered, that the disor-

ganization in question is analogous to gangrene in other parts of the body—and that, like gangrene, it may arise from two different causes.

“ These are inflammatory action, and failure of circulation depending upon disease of the arterial system. *Ramollissement* arising from the former cause I conceive to be an affection which holds a prominent place in the pathology of acute affections of the brain, occurring in early life, and being accompanied by symptoms of an acute character. I have given my reasons for considering this as an affection in many respects distinct from the *ramollissement*, investigated with such care by the French pathologists, and particularly M. Rostan. This appears to be a disease of the aged,—the cases described by M. Rostan, having chiefly occurred in persons from 70, to 80, and upwards. It is accompanied by symptoms of a paralytic and comatose character, and is frequently complicated with extravasation of blood. I have already alluded to the frequency and the extent of the disease of the arterial system of the brain in advanced life; and there appears to be considerable probability in the conjecture, that this may be the source of the *ramollissement* in the cases of this class. The disease of the arteries consists of ossification, with thickening and contraction, frequently to a great extent, and sometimes with separation of the inner coat. It corresponds precisely with the state of the arteries, which we know to produce gangrene in other parts of the body, particularly in the toes and feet of old people; and, in another place, I have described a remarkable case, in which separation of the inner coat of the *iliac* artery produced gangrene of the whole extremity, which was fatal in four days.

“ The symptoms accompanying the *ramollissement*, in this form, do not appear to differ remarkably from those which occur in the other cases of palsy. The attack is frequently preceded by some of the usual symptoms indicating a tendency to disease of the brain; such as, headach, giddiness, partial loss of recollection, and numbness or pricking of some of the limbs. After some time, there occurs suddenly or more gradually a loss of power of one or more limbs, with embarrassment of speech, but without loss of intelligence. The patient is then confined to bed, helpless and oppressed, with more or less of palsy, but with a certain degree of intelligence; and dies after various intervals, either with gradual sinking, or with coma for a few days before death, or sometimes with symptoms of low fever. The symptoms seem frequently to advance more slowly than in the cases from extravasation, one organ, as the tongue, being first affected, and then one or more limbs after some interval. Pain in the affected limbs is also a frequent occurrence; and rigid contraction of them has been much insisted on, as a symptom characteristic of the *ramollissement*. It is, however, by no means a uniform symptom, for it is frequently wanting altogether; when it is present, in the early period of the disease, it frequently disappears in the course of it; and, in some of Rostan's cases, it left the limbs of the paralytic side and affected those of the other. It is also frequently observed in cases entirely of another kind—as in certain states of fever which terminate favourably. Convulsive affections of the limbs are also occasionally met with.

“ The patient is frequently, in the early stages, quite intelligent, and observant of every thing, although unable to speak, or able to speak but imperfectly. As the disease advances, he frequently becomes more oppressed and somnolent; but he is intelligent when roused, not entirely comatose till the last period, and sometimes never entirely so. In other cases, there is at first a considerable degree of coma, which after the first day goes off, the patient becoming quite intelligent, and giving appearances of recovery, which are found to be fallacious. The sensibility of the affected limbs is in some cases impaired, in others little affected; and, in some cases, they are found acutely painful. The *ramollissement* is of various extent. It seems to be most commonly seated in the more external parts of the brain, near the surface, but sometimes is found in more deep-seated parts, particularly in the *corpus striatum*. A small coagulum of blood is sometimes found involved in the softened part; and sometimes the softening is found to have taken place around the cyst of an old extravasation.”

It is curious that this softening, in an uncombined state, is much more frequently met with in the French than in the English hospitals.

GENERAL PATHOLOGY OF PARALYSIS.

Dr. A. acknowledges that there are great difficulties attendant on the investigation of this subject, since we find paralysis connected with so many different affections of the brain—and all these affections so frequently existing without paralysis. We must be contented with drawing such conclusions as the general tenor of our observations may authorise. Thus we find paralysis connected with the following morbid appearances:—

- " I. Simple and recent inflammation of the cerebral substance.
- " II. This inflammation passing into ramollissement.
- " III. The encysted abscess of the brain.
- " IV. Induration of a portion of the cerebral substance.
- " V. Extravasated blood in the ventricles; on the surface of the brain; and in cavities or cysts in the substance of the brain.
- " VI. The empty cysts from which extravasation has been absorbed.
- " VII. Serous effusion on the surface of the brain.
- " VIII. Extensive disease of the arteries of the brain."

Some other points are here touched upon by our author, not arising immediately out of the preceding classification. The first of these is loss of a considerable portion of the cerebral substance, a very remarkable instance of which is recorded by Dr. O'Halloran, where, from the destruction, by accident, of the frontal bone, a large suppuration took place—immense masses of brain came away—and "a frightful cavern" was left. On the 8th day, there was paralysis of the left hand and arm—on the 10th, of the left thigh and leg. The man lived till the 17th day, retaining his faculties till the last, and without any disturbance of the vascular system. The second instance is from cold. A man is mentioned by Dr. Clerk, who became paralytic in both legs, and partially in the arms, after being benumbed with cold on the top of a coach. He recovered by aid of mercury and the warm bath. Dr. A. has seen a case of paraplegia referred to this cause, and which has now lasted nearly three years, with little amendment.

" Dr. Powell has described three cases of paralysis of one side of the face, producing great twisting of the mouth, and in one of them, inability to shut the eyelids. The affection came on immediately after exposure to cold, by a cold wind blowing upon one side of the face; it was not accompanied by any other symptom; two of them were well in eight or ten days; but the third, a child, was not free from the complaint for three months. They seemed to derive benefit from sudorifics and the application of steam."

We wonder Dr. A. did not see that the above were cases of local affection of the portio dura, now so well understood by all attentive practitioners, and immediately afterwards adverted to by the Doctor himself. We need not dilate on this topic.

Dr. A. alludes to a modification of paralysis, apparently connected with the state of the circulation in the affected part. A lady (mentioned by Dr. Storer) was recovering from pneumonia, when, one morning, she was suddenly seized with acute pain in the left shoulder, extending to the arm, at the same time the whole left side became paralytic, the parts were cold, and the arteries of the limbs were without pulsation. On the right side the pulse was natural. For some days she seemed to be improving, but she died before any pulsation returned in the parts affected. She was not examined. We cannot advert to any more of the anomalous examples brought forward by our author, but proceed at once, to the important subject of Therapeutics.

OUTLINE OF THE TREATMENT OF APOPLEXY.

"From the facts which have been related, we have seen reason to believe, that there is a modification of apoplexy which is fatal without leaving any morbid appearance, and which probably depends upon a deranged condition of the circulation in the brain; we have also seen grounds for believing, that the cases which terminate by effusion are probably at their commencement in this state of simple apoplexy. We have seen farther, that we have no certain mark by which we can ascertain the presence of effusion; and finally we have found, that even extensive extravasation of blood in the brain may be entirely recovered from by the absorption of the coagulum. These considerations give the strongest encouragement to treat the disease in the most active and persevering manner. They teach us, also, not to be influenced in our practice, by the hypothetical distinction of apoplexy into sanguineous and serous; and finally, not to be hasty in concluding in any particular case, that the disease has passed into a state in which it is no longer the object of active treatment.

"In the treatment of apoplexy, our remedies are few and simple. Those in which our chief reliance is to be placed are, large, and repeated blood-letting, active purgatives, and cold applications to the head, aided by an elevated position of the body, cool air, and the absence of all stimuli. Antimonials may occasionally be useful as an auxiliary, from their known effect in restraining vascular action, provided in the early stages they do not occasion vomiting.

"Our first great object is to take off the impulse of blood from the arteries of the head, by bleeding carried to such an extent as shall powerfully and decidedly affect the system, and by repeating it at short intervals as soon as these effects begin to subside. The first bleeding should probably be from the arm, but, after this, there seems to be an evident advantage in abstracting blood locally either from the temporal artery or by cupping. Much importance has been attached by some to bleeding from the jugular vein, as most likely to give immediate relief to the head; but we must remember, that the only jugular vein that can be opened is the external jugular, which has very little communication with the brain, and consequently that bleeding from it is probably much inferior to bleeding from the temporal artery. As soon as possible after the bleeding, means are to be taken for inducing strong purging. The most efficient remedy by far for this purpose is the croton oil, and, if the patient cannot swallow, it may be very conveniently introduced into the stomach, suspended in thick gruel or mucilage, through an elastic gum tube; the operation should be expedited by strong purgative injections. This is always to be considered as a most important and leading point in the treatment of apoplexy; and though, in arresting the progress of the disease, our first reliance is upon large and repeated bleeding, the first decided improvement of the patient is generally under the influence of powerful purging. The effectual application of cold to the head is the third remedy on which we rely, and it

is equally applicable to the different states of the disease, whether arising from simple apoplexy or from extravasation. It may be applied either by means of iced water, or pounded ice in a bladder; or by a full stream of cold water directed against the crown of the head, and received in a basin held under the chin, while the patient is supported in a sitting posture. I have formerly given an example of a patient restored in a few minutes or rather seconds by this remedy from a state of perfect apoplexy.

"The active use of these remedies is sometimes followed by a very speedy removal of the apoplectic state. In other cases, though little immediate effect may be produced, yet, by a persevering repetition of them, the coma begins to subside after some time, perhaps a good many hours, or even several days. In other cases again, they may be used in the most active manner without relieving the patient, and after all we may find upon dissection, that the disease was still in the state of simple apoplexy. This important fact cannot be too often repeated or too carefully kept in mind; it should lead us to prosecute the treatment of every case of apoplexy with the utmost vigour and perseverance. In one of the last cases that occurred to me, the bleeding was repeated to the extent of upwards of one hundred ounces, assisted by purging from the croton oil, repeated to the extent of above twenty drops, and the case terminated favourably, after the symptoms had continued in a very doubtful state for three or four days.

"In the extent of our evacuations, indeed, a due regard is certainly to be had to the age and constitution of the patient, and the strength of the pulse; but I think we have sufficient ground for saying, that there are no symptoms which characterize a distinct class of apoplectic affections, requiring any important distinction in the treatment; or in other words, a class, which in their nature do not admit of blood-letting. On this important point, we may refer with some confidence to the facts which have been related. Weakness of the pulse, and paleness of the countenance, we have seen to be frequent symptoms of the worst form of sanguineous apoplexy; and on the other hand we have seen cases terminate by serous effusion, which were accompanied by strong pulse and flushing of the countenance. Finally, we have seen one remarkable case in which there existed every circumstance that could lead us to consider the disease as serous apoplexy, but which was fatal without any effusion; and another in which there was most extensive effusion without any apoplectic symptom. It is likewise to be kept in mind, that in apoplectic affections the strength of the pulse is a very uncertain guide, for nothing is more common than to find it upon the first attack of apoplexy, weak, languid, and compressible, and becoming strong and full after the brain has become in some degree relieved by large blood-letting."

Dr. A. details some cases occurring in old and infirm people, which were treated on the foregoing principles, though their ages and constitutions might have seemed to forbid any measures of the kind. We shall glance at one or two of these *en passant*.

A woman, aged 70, of spare habit, and thin withered aspect, fell down in the street speechless, and paralytic of the left side. Dr. A. saw her in four or five hours afterwards. She was oppressed, but not entirely comatose—she was entirely speechless and paralytic—pulse 96, and tolerably strong. She was bled to 15 ounces—purgatives were exhibited—and cold was applied to the head. The following day, she was something better—but, getting worse in the evening, she was again freely bled, and purgation was continued. At the end of a week she was able to walk with assistance—and in a few days more she was quite well.

The following case we shall give in our author's own words:

"A gentleman, aged 70, of a spare and feeble habit, and very infirm from frequent attacks of asthma, without any warning fell from his chair on the floor in a state of *perfect apoplexy*, accompanied by violent *convulsion*. When I saw him, an hour after the attack, he was still in a state of perfect coma; the convulsion had recurred at short intervals, and had affected chiefly his arms and his face. His face was pale; his pulse was of good strength and a little frequent. He was largely bled from the arm; and an active purgative was given, assisted by a purgative enema, and cold was applied to his head. The convulsions continued for some time to recur with great violence; they then became less severe, and at length ceased about three hours after the attack, leaving him in a state of coma. But the purgative having soon after operated freely, he recovered his recollection. Next day, he complained of headach, and took more purgative medicine; and after a few days more he was in his usual health."

We have always thought that it was an error to define a disease to be "perfect apoplexy," where there is "violent convulsion." The definition—or, at least, the essential pathognomonic features of apoplexy, are, loss of *sense and motion*. How, then, can we reconcile perfect apoplexy with convulsions? To us it appears that the combination in question should be termed "*APOPLEXIA EPILEPTICA*," and not perfect apoplexy.

We have now considerably exceeded the limits which we originally chalked out for this department of Dr. Abercrombie's work. The practical nature of the publication, and the talents of the author were seductions, which, like the apples of Atalanta, constantly drew us aside from the *end* which we had in view. These *digressions*, we hope, will be pardoned both by author and reader. We shall again have occasion to pay our respects to Dr. Abercrombie, when on the subject of spinal diseases.

In an appendix to the part on apoplexy, Dr. Abercrombie has added some interesting observations, modestly entitled "*CONJECTURES*," in regard to the circulation in the brain. The brain, we know, is peculiarly situated, in consequence of the bony and unyielding box in which it is contained. When, therefore, a person dies of apoplexy, and we can discover no extravasation or congestion, we are naturally led to ask ourselves what was the pathological condition that caused death? We know that when animals are bled to death, their brains exhibit either a natural appearance, or the vessels unnaturally turgid with blood. From the situation of the brain, it is probable that no state of things can materially augment or diminish the actual amount of fluids within the cranium.

"The cranium is a complete sphere of bone, which is exactly filled by its contents, the brain, and by which the brain is closely shut up from atmospheric pressure, and from all influence from without except what is communicated through the blood vessels which enter it. In an organ so situated, it is probable, that the quantity of blood circulating in its vessels cannot be materially increased, except something give way to make room for the additional quantity, because the cavity is already completely full; and it is probable, that the quantity cannot be materially diminished, except something entered to supply the place which would become vacant."

All this we are ready to grant; but the relative proportions of blood cir-

culating in the arterial and venous systems of the brain may, from circumstances be greatly changed. Thus the arterial system may become surcharged—with a corresponding diminution of quantum in the venous system. It is clear that this change of balance in the circulation of the brain must cause unequal pressure, or even disruption of situation in certain parts of the brain, the effects of which may be serious, or even fatal. Thus the portions of brain in the tracts of the large arterial trunks must be injuriously pressed upon, when these vessels are inordinately dilated, and the same with the parts contiguous to veins, when it happens to be their turn for turgescence. But, independent of any material change of balance in the arterial and venous circulation of the brain, it must be remembered that, even if no more blood could be pushed into the vessels at one time than at another, still the *attempt* to push in more—namely the *vis à tergo* acting on the arteries, or interruption to the return of blood from the veins, must cause *pressure* on the brain generally—and this pressure is, in our minds, quite sufficient to account for the sudden deaths which we sometimes see in apoplexy, without any *post-mortem* appearances to account for the fatal termination. This *pressure* Dr. A. appears determined not to see—or not to acknowledge. But we shall not urge the business further in this place. The following practical observations are deserving of record, as bearing on the subject under discussion :

“A gentleman, aged about forty, had been for some time losing considerable quantities of blood by arterial hæmorrhage from the rectum. Considering it as merely hæmorrhoidal, he had paid little attention to it, until his friends became alarmed by his altered appearance. From being strong and rather plethoric, he had become weak, exhausted, pale, and haggard. He had anasarca of his legs—his pulse was frequent and feeble, and much excited by the least exertion. Along with these symptoms, he was liable to strong and irregular action of the heart, and complained of giddiness, tinnitus aurium, violent throbbing in the head, and frequently of throbbing headach. On examining his rectum, a fungous tumor was found within the sphincter, on the apex of which a small artery was bleeding *per saltum*. This was tied, and there was no return of the hæmorrhage; and under the use of nourishing diet, and a liberal allowance of wine, all his other complaints disappeared. He made up so rapidly in flesh and blood, that not long after, apprehensions were entertained that he was becoming too plethoric, and it became necessary to reduce his regimen, but under these circumstances he had no return of the symptoms in his head.

“A lady, aged twenty-five, had been frequently bled on account of symptoms in the head which had supervened upon an injury. Considerable relief had followed each bleeding; but the symptoms had soon returned so as to lead to a repetition of the bleeding at short intervals, and this had been going on for several months. When I saw her, she was stretched upon a couch, her face of the most death-like paleness, or rather of the paleness of a stucco figure, her pulse very rapid and as small as a thread, her general weakness extreme. The mass of blood appeared to be reduced to the lowest point that was compatible with life, but she still complained of frequent headach, violent throbbing in the head, confusion and giddiness. It was evident that evacuations could be carried no farther, and, in consultation with a very intelligent medical man who had the charge of her, it was agreed as a last experiment to make trial of the opposite system, nourishing diet and tonics. In a fortnight she was restored to very tolerable health.”

IX.

Pathological and Practical Observations on Spinal Diseases ; illustrated with Cases and Engravings. Also, an Inquiry into the Origin and Cure of Distorted Limbs. By EDWARD HARRISON, M. D. F. R. A. S. Ed. Royal 8vo. pp. 294, with 15 plates. Price One Guinea. T. & G. Underwood, 1827.

THERE are few men who have had more opportunities of studying spinal distortions and diseases than Dr. Harrison—and, therefore, if he has profited by his experience, and laid the results of his observations candidly before the public, his book must prove valuable to society at large. Dr. H. assures us that spinal distortions, from constitutional causes, are become so universally prevalent, “that we meet with but few females, above the condition of laborious servitude, whose backs are perfectly straight.” If this be true—and we fear it is not very far from the truth—then the progress of civilization and the “march of intellect,” like the “paths of glory,” “lead but to the grave.” We say the grave—for were spinal distortions only productive of deformity, no great evil would result. The pride of the young belle might be lowered, and the labours of the stay-maker might be increased—and there the mischief would end. But, alas! the unsightliness is the smallest part of the misfortune.

“A little consideration will be sufficient to show that the spine constitutes an essential portion of many animals, and that in the human body a greater variety of complicated sufferings arise out of its derangements than from those of any other organ. It affords support to the head, ribs, arms, and internal viscera. Numerous nerves issue out of its cavity, to be distributed over the skull, trunk, and limbs. Others strike inwards to the internal structures, and regulate their vital functions. It follows that the disorder of an organ, which directs the motions of so many members, and is besides destined to control such numerous, complicated, and diversified operations, must be capable of producing the most distressing effects.”

Dr. Harrison does not decide whether these maladies have lately increased, as is generally supposed—but he has little hesitation in asserting that, “in our cold and variable climate, few delicate girls are wholly exempt from their influence.” Whether the distortion be a lateral or spiral curvature—a projection outwards, constituting the hump-back or curved spine of Pott—the anterior or forward curve—displacements of single vertebræ—or, which is more common, a deformity compounded of some or all of these varieties, Dr. H. maintains but one kind of pathology for all.

“Viewing matters in this light, I have ventured to maintain, that *where the organisation remains sound* the several examples of spinal distortion are occasioned by the ligaments giving way irregularly, and suffering the vertebræ to slide from their proper stations in the column.

“Whatever occasions the ligaments to elongate, may, at the same time, permit them to stretch unequally. Where this happens, the joints will be likely to be protruded in that direction, because they will there encounter the least resistance.

“It is to this simple principle alone, as I conceive, that the various constitutional distortions owe their form. If the protrusion be backward, a gibbons swelling or hump back will follow. The curve is anterior or forward when the spinal column sinks inwards. The sigmoidal, lateral, or serpentine deflection, is occasioned by the ligaments allowing the vertebræ to make a deviation generally towards the right, between the shoulders, and another towards the left, in the loins.”

There is some ambiguity in the above passage; for surely, if, from constitutional disorder (to which Dr. H. traces these distortions) the ligaments

are so weakened, as to "give way irregularly," their organization cannot be called sound. If the coats of an artery give way irregularly, so as to form false aneurism, can its organization be considered sound?

Dr. H. informs us, that his researches have been almost entirely confined to that species of spinal complaints which originates in constitutional debility. He does not extend his inquiries to the varieties proceeding from hurts, the destruction of parts and other causes. His view of spinal complaints being (he thinks) in several respects new, he determined to confine his observations, in the first instance, to the faculty exclusively—and, therefore, almost the whole of the present expensive volume was published, in a series of essays, in the Medical and Physical Journal. But having had wider experience, and (which is rather remarkable) "more time for reflection," he now ventures upon a **BOLDER FLIGHT**, by addressing himself to the **GENERAL READER**. Now, in our humble opinion, this "bolder flight" is like that of ICARUS, a complete descent. Any dunce—any quack, may address himself, and with very considerable success, to the **GENERAL READER**;—but when he soars, on Icarian wings, to the professional public, the wax dissolves—and down he goes! The foregoing declaration is the most injudicious that Dr. Harrison could have possibly made. He tells us that it is now more than eight years since he first imbibed his present opinions respecting spinal pathology. We find that the essays composing the volume before us began to be published eight years ago—and are now merely republished, with the addition of plates. The inevitable conclusion is, that these essays were essays tentative—that is, they were a series of special pleadings, unsupported by the only sure basis, morbid anatomy—and probably, at that time, grounded on very few personal observations. This consideration greatly lessens our confidence in Dr. Harrison's doctrines. Indeed the want of morbid anatomy, and the exuberance of unsupported and gratuitous assertion, are fatal to this volume. What must the anatomist and physiologist think of such arguments as the following in support of *ligamentous*, and in contradiction of *muscular* debility as the cause of spinal distortions?

"Were spinal distortions to originate in the muscles, as some experienced practitioners affirm, we should find them most prevalent among the agricultural youth of both sexes, who, in carrying heavy burdens, and performing other laborious works, bring their muscles into the most vigorous and long-continued contractions; yet it is well known that the disorder seldom appears among them, and, when it does show itself, can be traced to some obvious cause. It follows from this exemption among our brawny labourers, that spinal maladies are seldom produced by muscular action alone, unless where existing infirmity in the vertebral column favours its operation."

Who ever dreamt or said that active muscular action of the spine could possibly conduce to spinal distortions? Did the late Mr. Wilson, the late Mr. Shaw, or the late Mr. Bampfield ever preach such doctrines? No! they taught the very reverse—namely, that want of exercise weakened the spinal, as it did all other muscles, in consequence of which the spinal column was not properly supported, and curvatures took place. Did not Mr. Wilson recommend a weight to be carried on the head, for the specific purpose of exercising and strengthening the spinal muscles? How then could Dr. Harrison bring forward such *distorted* representations of other men's sentiments?

And what proofs, from anatomy, physiology, or analogy, does Dr. H. adduce to show that the ligaments, rather than the muscles of the spine, are

weakened by constitutional disorder? Not one that is, in the slightest degree, satisfactory. We see the muscular system immediately prostrated by any constitutional indisposition—and that in a far more rapid manner, and to a far greater extent, than ligaments and tendons. Yet to maintain a new or peculiar doctrine, we must be forced to believe that it is on the ligaments of the spine, rather than on the muscles, that constitutional disorders exert their debilitating influence. Speaking of exercise as a mean of strengthening the spinal muscles and lessening spinal curvature, Dr. H. gives us the following assertions instead of proofs:

“Has the vertebral column been restored, in a single instance, to its natural shape during this treatment? Has the cure been rendered more perfect, or been finished in less time, with these auxiliaries, than by adopting the horizontal position and resting contrivances of Mr. Baynton? According to my observations, the result has always been unfavourable, both in time and all other respects. Nor should this excite surprise; the disorder is situated in the articulating structure below the muscles; their motions, at every turn and change, necessarily agitate and disturb the vertebral joints, through their tendinous attachments, and the cure is impeded, rendered less certain, and less perfect, than if the treatment had been restricted to rest alone.

“Highly as I approve of Mr. Baynton’s plan, in taking off the incumbent weight, in giving the muscles and tendinous fibres an opportunity to adapt themselves to their new situations, I think it is extremely defective, *because it encourages no trials to replace the luxated vertebræ in their former positions.* It, therefore, leaves the patient in a state of deformity, and, as an unavoidable consequence of it, in bad health.”

“*Happily, these vertebral dislocations, from internal causes, may be easily removed in every recent, and in many old cases, so as to leave no traces in the appearance of the back, or in the health of the individual.*”

In the above passage, the whole jet of the new doctrine is, intentionally or unintentionally, disclosed—at least to the professional reader. Every case of distorted spine depends on relaxation of certain ligaments, and partial luxation of certain vertebræ—hence, each case differs from another, and requires the discriminating eye and adroit manipulation of the practitioner. God forbid that we should impute to Dr. Harrison, or to any other doctor, the remotest idea of charlatannerie; but we do believe that it would be difficult to devise a system better adapted to the practice of that art, than the spinal pathology here delineated. The following extract of a letter from Dr. Harrison, to a young lady 26 years of age, explanatory of her own case, and his peculiar doctrines, is too delicate a morceau not to be recorded in the noble *art and mystery* of medicine!

“To me it appears much more probable, that the malady is *wholly confined to the connecting ligaments of the vertebræ.* These having lost their proper tone and firmness, gradually stretched, and grew longer. Owing to this infirmity, the prominent vertebræ separated, and removed further asunder. The elongation would of course lead to some changes in the arrangement of the vertebræ. Being under less confinement, they gradually deserted their former places in the column, to enter into new ones. This alteration of situation is, I think, easily explained upon anatomical principles. None of the vertebræ are in actual contact, or touch, though they approach very nearly to one another in several places. Wheresoever they approximate, something is interposed to prevent their junction and cohesion. The bodies are separated by cartilage, and their processes by a *slimy bag*, which keeps them apart. The ligaments constitute the chief connecting medium of the column. They are naturally firm, strong, and curiously interwoven among the vertebral prominences. So long as they preserve their *strength unimpaired, no change in position, or derangement of parts, can possibly occur.* There is

no vacillation, no permanent alteration of form. The *flexions* and *flexures* are performed with ease. These motions having ceased, and the column being again at rest, the parts return to their former places. When, however, a particular attitude is frequently repeated, or long persevered in, the ligaments concerned gradually accommodate themselves to the acquired position. Should this constrained habit be much longer continued, deformity will assuredly supervene. Such is, I conceive, the origin and progress of spinal complaints, when they proceed from weakness in the ligaments. In your case the disorder seems to have commenced in them, and can, I think, be removed by restoring the extruded vertebræ to their former stations. With a view to effect this desirable change, I propose to employ strong frictions to the prominent vertebræ. These to be followed by well regulated pressure, directed to the same parts.—After the process has concluded, I should confine the vertebræ with long slips of adhesive plaster, to prevent their receding. Lastly, the trunk is to be immediately replaced in the supine direction, and to be furnished with a mechanical contrivance to maintain constant pressure upon the prominent vertebræ. These are some of the means, which I venture to suggest, for the cure of your malady. As the vertebræ project almost straight backwards, I think the proposed plan is more likely to succeed, than if they had taken a lateral, or forward direction. I think it only candid in me to inform you, that after a diligent search among the medical books in my possession, I can no where discover any authority either in support of the doctrine, or the practice, that I have ventured to advocate."

After this specimen of the "bolder flight" which Dr. Harrison has taken from the low ranks of his brethren, to the GENERAL READER, we must lay down the pen. We are positively ashamed (if it will be believed that a REVIEWER can have any sense of shame) to record such a passage from the writings of a physician of the present period, on our pages. But the above extract will characterise the book under review, better than any thing which we could say. The pathology is erroneous—the practice is, for the most part, concealed—and the plates are more calculated to frighten the GENERAL READER than to convey any information to the MEDICAL PRACTITIONER.

X.

Hints to young Medical Officers of the Army on the Examination of Recruits, and respecting the feigned Disabilities of Soldiers; with Official Documents, and the Regulations for the Inspection of Conscripts for the French and Prussian Armies. By HENRY MARSHALL, Surgeon to the Forces. Octavo, 224. London, 1828.

THAT portion of Forensic or Judicial Medicine which more particularly belongs to the military service of the country, we believe, has not hitherto been treated, by any person, in a distinct work. We are aware that the subject has been incidentally touched by several authors of the highest repute, viz. Dr. Gordon Smith, Messrs. Paris and Foublanque, Dr. Beck, and particularly Dr. Hennen, in his "Principles of Military Surgery." But, it has long been a desirable object that the military surgeon should be put into possession of a portable work, to serve him as a manual, upon the feigned defects and disabilities of recruits and soldiers, apart from the extensive range of medical jurisprudence, taken in the valuable works above-mentioned, and which, from their very nature, are too voluminous for the library of a military medical officer.

It appears to be the object of Mr. Marshall to bring before the view of his junior brethren, in a concentrated shape, the most approved method of examining recruits, an enumeration and estimate of those defects which are considered to incapacitate, or, to render a man unfit for military service, and also, to give an account of the defects or diseases most commonly assumed by the malingering soldier to avoid his duty, or to escape from the service. The author has very judiciously led the way to these intentions, by prefixing certain official documents from the War Office, and from the Director General of the Army Medical Department. He has also given the regulations for the "Inspection of Conscripts for the French and Prussian Armies," and thus brought into one view the recruiting systems of three of the great military powers of Europe. The following excellent remarks, by the Chief of the Medical Department, stands as a preface to the Prussian Regulations :

"The duty of inspecting recruits, and of determining whether they are fit or unfit for the military service of the country, is one of the most difficult and responsible an army surgeon has to perform. To enable him to execute it correctly and with suitable promptitude, he would require more knowledge and experience than is generally believed; he must possess an intimate acquaintance with anatomy, physiology, and pathology. A knowledge of these sciences is essentially required to qualify him to decide upon the health and general efficiency of recruits, and to distinguish between defects that may be real from those that are only feigned.

"He must also be well acquainted with the duties of the different classes of soldiers, infantry, artillery, and cavalry, during war as well as in peace. The qualifications for performing so important a duty can be acquired only by long servitude and much experience.

"It is impossible to frame specific rules for the examination of recruits, so as to obviate every difficulty. In a great variety of cases the decision must depend on the discretion and experience of the inspecting medical officer."

From our own knowledge of the subject we can add, that in addition to the intimate acquaintance with the above divisions of professional science considered to be requisite by the Prussian Chief, that an experience of the "good and bad qualities of soldiers," as well as a forbearing temper, assiduous attention, and unremitting patience, are qualifications in the medical officer, equally desirable, and, even when possessed in the highest degree, they are not always successful in the detection of fraud. It is not our intention to raise a question, and to decide upon the comparative merits of the regulations for the different services here brought forward; they appear to us to be excellent, and each code to be well adapted for the nation and people for whom it was intended. There is a circumstance, however, in the French regulations, which we notice, because it goes to prove the severity of the conscript system, the rigid manner in which it was enforced, and the almost impossibility of escaping it. They divide the incapacibilities for military service into two tables. The first contains "*Evident infirmities, implying absolute incapability of military service, and which are left to the municipal administration of the canton.*" The second table "*Infirmities or diseases, which occasion absolute or relative incapability for military service, and which are reserved for the examination and opinion of the central administration of the department.*" And upon these *relative infirmities* the Code remarks—

"It is difficult to judge readily in every case, which does not present some sensible appearance of an organical lesion. To give a negative judgment would not be just,

because the conscript, at the time of his visit, might not find himself in that state which he complains of. On the other hand, he might feign deafness, pains, even a fit of epilepsy, without being in reality subject to any of these diseases, and an exception decided upon so equivocal a ground would be really an infraction of the law. It is therefore necessary to watch these young people, *either in a military hospital or in their private life*. The testimony of the surgeons who attend them, and that of *ten householders* of known probity, who are not related to him, public notoriety, certified by the constituted authorities, are so many means, which, added to recognised rational signs, may increase the probability almost to certainty, and found an impartial judgment. Moreover, as most of these diseases yield to time or skill, there is no need for granting an absolute or definite exemption for those recruits who are afflicted with them, before the surgeons can pronounce their opinion with perfect certainty: it is necessary that the young men should present themselves for examination at stated periods, and sometimes for several months."

Mr. Marshall divides infirmities or defects which disqualify for military service into three classes, viz :

1. Obvious defects (chiefly external.)
2. Defects not obvious (chiefly internal.)
3. Feigned defects.

The obvious defects are mostly enumerated in a small code of "Rules to be observed on the Examination of a Recruit," drawn up for the guidance of district surgeons by the Army Medical Board. We need not repeat them here, but we shall give the author's plan of examination entire, as it appears to us to be perfect; and we apologize for so doing on the score of utility, as it may be useful to civil practitioners who are occasionally called upon to pass a recruit, and who may not obtain possession of the work.

"The recruits to be examined are to 'fall in,' and be inspected in their clothes. During this inspection we frequently succeed in detecting deserters, and men who have been in the army, and discharged in consequence of disease and disability. Let them next be examined singly undressed. Upon entering the inspection room, each recruit is to walk a few times pretty smartly across the apartment, for the purpose of ascertaining that he has the perfect use of his inferior extremities. This is a very essential part of the business of inspection. Notwithstanding a rigorous observance of it, however, I have known a medical officer called upon to explain why he approved of a recruit, who, after joining the corps to which he belonged, did not perform the 'goose step' to the entire satisfaction of his commanding officer. He is then to be halted, set up in the position of a soldier under arms, with the knees about an inch apart, and examined from head to foot. The inspection may be conducted with reference to the following qualities, or conditions of the body:

"Colour.

"Muscular capability.

"General health.

"The condition of the external surface, comprehending chronic eruptions, marks of punishment, ulcers, cicatrices, &c.

"The configuration of the thorax, spine, and pelvis.

"The condition of the superior extremities, comprehending symmetry, fractures, contractions, mutilations, &c

"The condition of the inferior extremities, including symmetry, &c as also varicose veins, nodes, flatness of the soles of the feet, distorted and supernumerary toes.

"Should no material defect be perceived during this survey, the examination should go on. The recruit is then to perform, in imitation of the hospital sergeant, the following manual evolutions. To stretch out the arms at right angles with the trunk of the body, then touch the shoulders with the fingers, next place the backs of the hands together above the head; in this position let him cough, while at the same time the examiner's hand is applied to the rings of the external oblique muscles. Examine the spermatic chords and testes, then pass the hand over the bones of the legs. The recruit will next stand upon one foot, and move the ankle joint of

each extremity alternately. And when any doubt is entertained, respecting the efficiency of the ankle-joint, or any part of an inferior extremity, he should be made to test his strength in that respect by hopping upon the suspected limb for a short period, and the size and aspect of the corresponding joint or part of the opposite limb should also be accurately compared. Let him then extend the superior extremities forward, for the purpose of having his arms and hands examined, he is in this position to perform flexion and extension of the fingers, and to rotate the fore-arms. The head is next to be examined, including the ears, eyes, nose, mouth; then ascertain that he possesses the function of hearing, and the power of distinct utterance; next inquire whether he has passed through the small pox or been vaccinated. The examination of a recruit in this manner will require about five or six minutes; and if carefully performed very few disqualified men will be admitted into the service."

"The leading external characters of a good constitution may be briefly enumerated: a tolerably just proportion between the different parts of the trunk and members, a well shaped head, thick hair, a countenance expressive of health, with a lively eye, skin not too white, lips red, teeth white and in good condition, voice strong, skin firm, chest well formed, belly lank, parts of generation well developed, limbs muscular, feet arched, and of a moderate length, hands large."

To look for a specimen of the *beau ideal* of the Greeks, or what may be termed the perfection of beauty in mankind, would appear to be a hopeless search in these kingdoms: for, according to Mr. Marshall,

"Perfect symmetry of the human body may be said never to exist. In almost every individual, a want of harmony in some part or other is discoverable. There is often great want of symmetry between the trunk and inferior extremities, the former being full in proportion to the latter, and vice versa. Even the lateral sections of the body are often disproportioned in size, and not strictly similar in form."

Mr. Marshall's 2d class, defects not obvious, is chiefly a catalogue of internal disqualifying diseases, such as, according to the French regulations, would not be decided upon as rendering a man totally unfit; but would cause the individuals to be remanded and brought forward, from time to time, until the complaint ceases, or, what would be considered sufficient proofs of its existence are produced. We shall therefore pass on to the 3d class—feigned defects. And here we cannot help remarking, that the author seems to be perfectly at home he treats the subject *con amore*, he seems to possess, if we may so express it, the most determined antipathy to malingerers of every species. Not contented with explaining their manœuvres in every disease that it is possible to simulate, but in a great many, that it might be thought almost impossible, he publishes their cases without any compunction, and some whom he appears to have pursued, for a time,

* The following note from page 75, as a curiosity is worthy of attention:

"Abstract of the measurement of the arms and legs of one hundred recruits, which was made with a view of ascertaining the relative equilibrium of the extremities. The arms were measured about equal distances from the shoulder and the elbow, and the legs round the thickest part.

	Right arm thicker than left.	Left thicker than right.	No difference.	Total.
Right handed individuals	68	5	18	91
Left handed	1	6	2	9
				<hr/> 100 <hr/>

No.	Right leg thicker.	Left ditto.	No difference.
100	35	37	28

The difference in the thickness of the limbs was from six eighths of an inch to one eighth,

that would have disheartened many, having brought to bay, he produces to his readers, with a satisfaction that can only be the result of a conscious performance of duty.

We entirely agree with the author, and every person of experience must, that nothing can be more detrimental to the service or subversive of discipline than a disposition to malingering, and we consider it a serious part of the duty of every military medical officer to check it, and to endeavour to defeat the purpose of the malingerer by the exertion of all his ability, and by every means in his power. These means are very extensive, but like every department of the medical profession, they are not to be acquired without thought and study—there is no royal road to this acquisition any more than to the knowledge of anatomy or pathology. A person may have received the best education that the schools of London, Edinburgh, or Dublin, can grant, and he may be, from his knowledge of diseases, and his method of treating them, perfectly fit to practice among the higher classes of society in the metropolis, and yet (quoad the treatment of simulators) he may be very inefficient for the charge of a regimental hospital. There is, it must be confessed, an irksomeness in the investigation of feigned diseases, that the high bred practitioner, or one just arrived from the schools, might find a difficulty of enduring, and nothing but zeal for the profession and the service, combined with talent and a thorough knowledge of morbid deviation from health and healthy structure, can overcome. The profession at large, and more particularly those who intend to practise in a public service should regard a work of this nature as a valuable present, an occasional reference to which will save them much time and trouble. The cases detailed must be considered authentic, the collection and classification of them demanded a consumption of time and knowledge of the business which few could have brought to it, and even with these advantages, we consider the situation, which we understand Mr. Marshall has held in the recruiting department for some years, to have been an indispensable requisite to the composition of the work. The cases may be regarded as so many beacons, pointing out to the medical officer the difficulties which surround most instances of feigned disability, and especially of bringing the simulators to conviction, a point, which, if possible, should never be left undone. The instances of successful scheming have their value, and can in no manner be considered as at all inculcating the medical officers who had to deal with them. An army surgeon can no more expect to defeat every case of malingering than he can to cure every case of fever, but he must do his best, and it is due from an author to the public to produce some of his bad cases as well as his successful ones.

“To estimate what degree of disease actually exists, and how much of the assumed disability is only pretended, is often attended with considerable difficulty, and we are carefully warned, by the recital of a remarkable case which happened to the late Dr. Gregory of Edinburgh, not to be hasty in making a determination from which we cannot retract. The necessity of proceeding cautiously is further enforced by the following remarks:

“I believe it is admitted, even by the most experienced military medical officers, that notwithstanding every care to draw a just induction from symptoms, we may in some cases form wrong conclusions. In no instance therefore should means be employed, for the purpose of exciting an assumed simulator to return to his duty, which we would regret adopting if the disease were to prove genuine. Restraint and any measure that bears the character of punishment, is not only illegal, but generally inexpedient. But although physical pain, beyond that which may be occasioned by the remedies suitable for the alleged disease, if real, should not be inflicted, a medical officer may in many cases be warranted in endeavouring to pro-

duce some mental uneasiness—by absconding hope, exciting shame, and awakening a sentiment of fear. These means may be employed in a variety of ways; and he who can best employ them, either singly or combined, according to the situation in which he is placed, and the tempers and dispositions of individuals, will be most successful."

We are desirous to give a case or two in proof of what a determined character will endure, and the difficulty which sometimes occurs in convicting an impostor, but, we confess, where there are so many cases in point, it is difficult to make a selection. We take the following of Pat. Maguire, because the case is complete throughout, a perfect conviction ensued, and in the course of his treatment he was under several medical officers of the first respectability.

"Pat. Maguire, a native of Portumna, County Galway, enlisted into the Hon. East India Company's service early in the year 1824. After being a few months at the Depôt, Chatham, he became suddenly affected with loss of power of the right leg and thigh. When standing, he merely touched the ground with the toes, and upon attempting to walk, the limb bent under him. He attributed this feebleness of the leg to a fall he received when descending the barrack stairs; but there was no moral evidence in support of his assertion regarding the fall, and the limb evinced no trace of disease or disability; so that from the first he was suspected of scheming. After being a few months under the care of Dr. Davies, he was transferred to Fort Pitt general hospital, where he continued for nearly a year, and underwent a great variety of treatment. Maguire's case must be in the recollection of many of the medical officers who were on duty in Chatham during the years 1824 and 1825. Although still presumed to be an impostor, he was, on the 13th August, 1825, brought before a medical board, who came to the following conclusion: 'The Board have carefully examined Pat. Maguire, and think that he simulates disease to a greater or less degree, but do not consider he is likely to be benefited by further treatment, and therefore recommend him to be discharged from the service.'"

The finding of this Board not having been considered satisfactory at the Horse Guards, he was examined by another medical board on the 28th September, who reported, that they "were of opinion that he (Pat. Maguire) laboured under chronic rheumatism of the right hip; and although they deemed the disease in a great degree simulated, were yet of opinion that he was unfit for the Company's Service, and unlikely to be passed into the service again if discharged."

He was discharged on the 9th October, and in January, 1827, he addressed a letter to Colonel Hay, commanding the Company's Depôt, Chatham, stating that his health was in "a most deplorable situation," and applying for a pension in consequence of having been disabled in the service. In a few days after the date of this letter, he enlisted at Birr, in the 87th regiment, and was brought along with the other recruits from that part of the country to Dublin, where he was at first considered ineligible for the service, on account of the cicatrices of issues which had been established on the loins; but being a country recruit, he was referred to the final decision of a medical board, who approved him. He deserted from the Depôt of the district on the 17th March. When Maguire was examined at Dublin, it was not known that he had been in the Company's Service. On the 15th July of the same year, he, with the view of obtaining a pension, got himself examined at Nenagh by Dr. ———, assistant surgeon to the ——— regiment, who certified that he was "disabled in consequence of an injury in the loins and right thigh, and that he was incapable of earning a livelihood from the above causes." It is hardly necessary to observe, that this case will afford a useful warning to young medical officers, with regard to the granting of certificates of disability. This document was transmitted to me by a friend of Maguire's, in the hope that I would promote his views, a

circumstance which enabled me to ascertain the identity of the invalid from the Company's Service, and the deserter from the 87th regiment. A clue was also obtained as to where he resided, and measures were promptly taken by the recruiting parties, to seize him as a deserter, but without success. It may be observed, that Maguire was employed by a gentleman in the neighbourhood of Portumna, the same person who transmitted the certificate to Dublin, accompanied with a statement asserting, that, "from his own personal knowledge, he (Maguire) had not been able to do any thing for himself since he had been discharged." I think it is highly probable that the certificate granted in July was given at the request of Maguire's employer. It is supposed he has again enlisted, as he has not, since he first absconded, been seen by any of the recruiting parties on duty in the part of the country where he used to reside. The sequel of the case is disclosed in the Appendix page 220, where we are informed that

"Pat. Maguire surrendered himself at this Depôt (Dublin) as a deserter from the 87th regiment, on the 13th of February, 1828. Although there was, from the first, strong presumptive evidence that he was the same person who had been discharged from the Company's Service, still a *doubt* might be entertained in that respect. On examining him, however, every shade of uncertainty was removed. I found him to be the veritable Pat. Maguire that I saw in the East India Company's Depôt Hospital, and the Fort Pitt General Hospital in 1824 and 1825."

The cases of Haddock, page 162, and of Batt, of the Rifle Brigade, 164, are quite as strong, particularly the latter, but our limits will not permit us to copy them. The following is an instance of the successful trade of deceit, which some vagabonds have carried on in the army, and it is a forcible argument to medical and military officers not to be in too much hurry to dispose of a suspected case.

"Last year, a recruit, named Timothy Regan, was discharged from the Company's Service, at Chatham, in consequence of weakness of intellect. A few months after, he was brought before a medical board, at Fort Pitt, for the same defect, he being then a recruit in one of the regiments of the line. It was then discovered that he had, in a very short time, received *six* bounties. He persisted, for a short period, in denying, with great effrontery, that he had enlisted repeatedly; but he at last admitted the charge, and endeavoured to pass the whole business off as a good joke. He was finally ordered to join the 57th regiment, one of the corps in which he had enlisted."

We have been greatly amused, as well as instructed by these pages, but it is time to bring our account of them to a close. The object we have had in view, by these long extracts, is to stimulate our younger brethren in the naval and military services, to think and to inquire; and we can tell them, as the result of long experience, that much of the discipline of any corps or ship they may be called to serve in, will, as well as their own credit, greatly depend on their ability in counteracting feigned disease; and unless they have previously obtained, and industriously preserved a correct knowledge of pathology, their efforts will be vain and frequently grievous. The public have been greatly defrauded by malingerers, as they are technically called, and it is the bounden duty of every medical officer to prevent the continuance of it as far as lies in his power. The utility of the work is not confined to the medical officer only, it is worthy the attention of the military officer also, especially regimental staff officers, and those connected with the recruiting department. The volume may be considered a valuable addition to the military medical library, and as such, we strongly recommend it to the notice of those authorities who preside over the medical departments of the state.

XI.

Elements of Physiology. By J. FRED. BLUMENBACH, M. D. F. R. S. Professor of Medicine in the University of Gottingen; translated from the Latin of the Fourth and Last Edition, by JOHN ELLIOTSON, M. D. Cantab. Fellow of the Royal College of Physicians; Physician to, and Lecturer on, the Practice of Medicine in St. Thomas's Hospital.

— Latas a Numine leges
Religiosa doce, mentesque cupidine veri
Allice.

LOAN BACON tells us that some books may be tasted, some may be chewed, and some few may be swallowed and digested. They, indeed, on which the latter process can be performed are exceedingly few; but when met with, the person who has enjoyed the feast, should, in the goodness of his heart, present the same to his fellow creatures, in order that they, with him, should have the pleasure of drawing thence their nutriment. This is exactly our feeling in presenting to our readers the work mentioned above; a work, the merits of which are of the highest order. Blumenbach is its author; a man, known as being possessed of all the preliminary knowledge necessary to the formation of a good physiologist. Comparative anatomy is his delight; he is a good linguist; has read much; has a sound judgment; and seems to be a sincere lover of truth. Another peculiar advantage is, his freedom from any particular theory or hypothesis. He has, what may be called, a width of mind; his intellectual grasp is truly extensive; and he does not, like many of our medical physiologists, begin theorizing with a single fact for the base of a system. He has the ability to analyse; and the effect of this is, that he arranges well, and defines, where he attempts definition, (which is not often,) with the most consummate skill.

Such is Blumenbach. A work, a foreign work in particular, labours under many disadvantages. Every country has a different mode of thinking; and often the individuals of one do not perceive the beauties of the views of the individuals of another, simply because these views are not presented to them in the way in which they have been accustomed to receive impressions and ideas. Another disadvantage arises from the circumstance of the dependence of the work upon the merits of a translator. The meaning of an author is often entirely altered, simply by the ignorance of the person who engages to put the original into a different language; his views are perverted; his illustrations are deprived of all their force; and a prejudice is thus raised against the work itself, that impedes, should the original be a valua-

ble production, the progress of knowledge, by keeping this product of a gigantic and well exercised mind from being contemplated in all the graces of its true character by the minds of others who can appreciate with accuracy and judge with fairness. Fortunately for science, Blumenbach's work has not been presented to the medical men of Britain under such circumstances. An individual, well known for his general attainments as a physician and as a scholar, has turned his attention to this work of translation; and, in tracing the thoughts of his author, has entered with the spirit of a true philosopher into the subject before him, and has shown the attentive delight excited in his mind by the rich notes with which he has studded the original. This individual is Dr. Elliotson; whom we are delighted to see engaged in what, by some, may be thought the menial office of a translator, simply on the belief that, as a fool is the best judge of a fool, so a wise man of a wise man.

But now to the work itself: which is divided into 44 sections, each of which is interesting: some more so than others.

The first section is upon the living human body *generally*, in the consideration of which Blumenbach points out three objects as worthy of attention: first, the *materials* of its subsistence, afforded by the fluids; second, the *structure* of the solids, containing the fluids; and third, the *vital powers*. In a note on this section, we have given to us a brief and clear account of the different arrangement of *elementary tissues* of which the organs of the body are composed; also of the proximate and ultimate principles of animal bodies; as well as those of vegetables.

Being thus introduced, an account is given in the second section of the *fluids* of the body; the classification of which is excellent: namely, the *crude*, as the chyle, and matters absorbed on the surface and conveyed to the chyle: the *blood* itself: those *secreted* from the blood.

Our physiologist then turns his attention to the *blood* in particular, the importance, the physical and chemical characters of which are succinctly enumerated. A curious fact is stated respecting the vapour, which is emitted from blood while still warm, namely, that it affords a nidorous smell, which is most remarkable in the blood of carnivorous animals. In a note are stated the various opinions of physiologists respecting the quantity of blood in a well-formed adult; the lowest estimate being that of eight pounds, the highest 100.

Blumenbach maintains, that aeriform fluids in the *elastic state* cannot exist in the blood, since he found that a small portion of the purest air, infused into the jugular vein, excited palpitations, drowsiness, convulsions; and if the quantity was a little increased, death ensued. In a note by Dr. Elliotson, the facts stated, make us conclude that the above opinion of Blumenbach must admit of limitation, since from Dr. Elliotson's statements we infer, that the injurious effects of the injection of air are dependent on the *rapidity* of the process. One fact cannot be passed unnoticed: it is this, that "if warm water is introduced, (an equal quantity of blood being first removed to prevent over-distention,) mere debility ensues, proportionate to the quantity: but if oils, or mucilages, or an inert impalpable powder are injected, life is at once destroyed by the obstruction of the minute ramifications of the pulmonary artery." Dr. Elliotson then gives a brief but excellent sketch of the different theories respecting the coagulation of the blood, to which we must refer our

readers, and take this opportunity of pointing out one circumstance, leading the mind to admire the wisdom of the Creator. It is this, "Blood almost always coagulates also in the vessels running through healthy parts to others in a state of mortification, and in large vessels adjoining a pulmonary abscess: in which cases, the final cause, prevention of hæmorrhage, is evident."

In a note on the blood of brutes in relation to the blood of man, the translator introduces all that is known respecting *transfusion*, noticing the experiments of Dr. Blundel, a gentleman who has saved many women by the process of transfusion from death, to the danger of which they have, by excessive uterine hæmorrhage, been exposed.

The next section presents to our view *the solids*, their chemical composition, their structure, &c. Blumenbach then describes the general diffusion, the peculiarities, the offices of the cellular tissue, which he calls the *mucous web*; and from the facts respecting this web, he concludes, "First, this membrane is so fundamental a constituent of our structure, that, were every other part removed, and it to retain its position, the body would preserve its form; secondly, that it forms a connexion and sort of passage between all parts of the system, however different from each other in nature, or remote in situation: a circumstance worthy of attention, as putting an end to the verbal disputes respecting the continuation of membranes, and affording an explanation of many morbid phenomena." The last remark is one worthy of a Blumenbach.

This physiologist maintains in addition, that this mucous web (Dr. E. prefers *cellular tissue*, because Blumenbach uses the term *vis cellulosa*, referring to a power possessed by this membrane) is derived from the lymph of the blood, "for I have seen lymph," say he, "transuded on the surface of inflamed lungs, and changed into this mucous web, which, by forming false membranes, unites these organs to the pleura."

The fourth section brings us to the *experimentum crucis* of every physiologist, VITALITY. Blumenbach has his opinions on this matter; which may be stated to be the following, previously noticing his introductory observation on this point.

"Although vitality is one of those subjects which are more easily known than defined, and usually, indeed, rendered more obscure rather than illustrated by an attempt at definition, its effects are sufficiently manifest and ascribable to peculiar powers only. The epithet *vital* is given to these powers, because on them so much depend both the actions of the whole body during life, and those which remain in some parts for a short time after death, that they are not referable to any qualities merely physical, chemical, or mechanical."

Blumenbach's peculiar ideas are stated in the following passage:—

"As to the question so long agitated by physiologists—whether the diversity of the phenomena exhibited in the similar parts of the living solid is to be attributed to modifications only, or to distinct species of the vital energy, we think it best to establish *distinct orders of the vital powers* according to the variety of phenomena by which they are manifested. These phenomena are threefold according to him:—*organic formation* and increase;—*motion* in the parts when formed;—*sensation* from the motion of certain similar parts."

The first gives the determinate *form* which every body has; and this species of the vital powers, producing the genital and nutritive fluids, and preparing them for organic nature, Blumenbach calls the *nisus formativus*. But this *nisus formativus* cannot be considered as essentially a vital power, because we find a certain formative power exhibited in inorganic matter in

the formation of crystals. This *nisus formativus* must therefore be considered as modified.

The vital powers manifested by *motion* Blumenbach divides into *common*, as those belonging to parts widely distributed : such as contractility to the mucous web ;—irritability to the muscular fibre ;—and into *proper* :—those possessed by some particular organs only, giving to them, for the purpose of particular anomalous actions, as the motions of the iris—the erection of the nipple. This contractility of the mucous web, we have already mentioned, our physiologist names it the *vis cellulosa* : and the end of this, he supposes to be to propel the serous vapour into the lymphatic system.

As regarding *sensation*, the third vital power, called also *sensibility*, also *vis nervea*, “ is the cause of perception in the mind, when irritation is excited in parts to which it is distributed.”

These views regarding vitality have two recommendatory circumstances : the first, that in this order we have the gradual succession followed in our formation : the second, that we have something tangible presented to our view.

Indeed, this last circumstance is one to which men at last are turning their attention. The human intellect is beginning to be freed from the trammels of superstition, which would, if possible, oblige men to think only in one way, and which delights to clothe palpable facts and sensible manifestations with a spiritual halo ; as if truth could be more sacred when thus surrounded, than when clothed in her simple beauty. The discussions about the *essential nature* of life, are, we trust, dying away. We now are learning to know life by its manifestations, and all that is important for us as practitioners to know is, that this life, whatever it be, is exhibited through parts, called *organs*, and that when these organs are in a sound state, then the vital powers are in harmony ;—when the former are diseased or injured, the vital powers are affected, which affection must be removed, not by spiritual discourses on life, but by removing the diseased state of the organ. It would be a great blessing were physiologists, before entering upon this question of life, to ask themselves *quid utile* ?

With respect to the vitality of the two great divisions of matter, Blumenbach seems to be of the opinion that *solids* have, as their peculiar property, vitality ; and that those fluids, thought to have vitality, have so only from the solids they contain. This celebrated physiologist disputes the vitality of the blood ; for his arguments on this head the reader must examine the work itself. Dr. Elliotson differs from him, and considers “ that fluids as well as solids are susceptible of life ;” and, at the end of this section, makes some interesting remarks on sympathy.

The fifth section embraces the mental faculties, a subject till of late not sufficiently attended to by the physiologist. These he arranges under two heads, the *intellectual faculty* and *appetency* ; more correctly and simply stated, the *intellectual* and *affective* faculties. Under the former are arranged *perception*, *memory*, *attention*, *imagination*, *abstraction*, *judgment*, and *reason* ; under the latter, *desires* and *aversions*. Blumenbach may be said to have a third faculty namely, *volition*.

This brief view given by Blumenbach is quite insufficient to explain the varied phenomena of the mind presented in its healthy and diseased exhibitions ; and Dr. Elliotson has, we are exceedingly glad to see, supplied the want by a clear and full account of Gall's *theory* (not *hypothesis*) ; in which is shadowed out the best system of the human mind. Every one indeed should read the terse and excellent note at the end of this section.

It will amply repay the perusal. We could extract it with pleasure. But we hope that this review will have the effect of an appetizer, to lead every one to enjoy the book for himself. But if this note may be with propriety recommended to notice, much more may those which are attached to the next section on health and human nature. We see in these the philosopher; a man, who ventures to stand forward in defence of his opinions, and does not shrink back for fear of consequences: a man, who goes to the tribunal of facts and hears the judgment of his own mind thereon, and obeys. And although we may not go in with every expression or opinion that Dr. Elliotson states in these notes, we testify, that as a whole, we consider the same as a master-piece, and will stamp the writer as an individual, who *can* think, *will* think, and *does* think. We detest that doctrine, too prevalent even now, that it is better to labour under delusion, than to advocate and hold forth truth, because these certain truths may be dangerous. Ignorance we have always considered as an evil;—even, in some cases, as a crime. So we trust, ever to consider it, and any individual, whoever he be, that endeavours to light the torch of truth at the funeral pile of error, we shall hail with respect and joy.

Blumenbach states four things as necessary to health:—fluids properly prepared—solids duly formed from the fluids—the invigorating influence of the *vital powers* upon the solids—lastly, a sound mind in a sound body. Considering these necessary circumstances, Galen might well assert that no one enjoys perfect health. Health is variously modified: the modifications are the *temperaments*, which are four—the *sanguineous*, the *choleric*, the *melancholic*, and the *phlegmatic*, each of which has its peculiar characteristics. This doctrine of the temperaments, though quite distinct, has been associated with *humoral pathology*; and medical men, in neglecting the one, have disregarded the other. Hence the little attention paid to temperaments, a want of attention which is the source of numberless evils.

Under this section, Blumenbach notices the general divisions of functions, into the *vital*, the *animal*, the *natural*, and the *genital*, which have nothing to recommend them except in aiding the memory, as these divisions are not according to nature. In the note A to this section, Dr. Elliotson gives a new view of temperaments, devised by Dr. Thomas, of Paris, who arranges the temperaments according to the predominance of the head, chest, or abdomen. p. 54. We again recommend to the perusal of every one the notes of this section.

In the next section Blumenbach examines, with the candour of a sincere observer of nature, the blood in its *motion*: and divides the subject, quite logically, into two parts; first, the *vessels* containing the blood; second, the *powers* propelling it. In speaking upon the arteries, this celebrated physiologist disputes the commonly-received notion, that the united capacity of the *branches*, in any part of the sanguiferous system, is greater than that of the trunk whence they arise. Blumenbach adds—

“But I fear that this is too general an assertion, and even that the measure of the diameter has been sometimes improperly confounded with that of the area. I myself have never been able to verify it, although my experiments have been frequently repeated, and made, not in vessels injected with wax, after the bad example of some illustrious physiologists, but on the undisturbed vessels of recent subjects, *v. c.* on the innominate and its two branches, the right carotid and subclavian—on the brachial and its two branches, the radial and ulnar.”

Blumenbach further remarks respecting this matter:—

“The inconstancy of the proportion between the capacity of the branches and that

of the trunks, is clearly shown by the various sizes of the vessels under different circumstances, *v. c.* by the relative capacity of the inferior thyroid artery in the infant and the adult; of the epigastric artery in the virgin and the mother near her delivery; and also of the uterine vessels in the vagina and the pregnant woman; of the omental vessels during the repletion and vacuity of the stomach."

Blumenbach maintains that, in the systole of the ventricles, the external portions of the heart are drawn towards their septum, and the apex of the heart towards the base.

"This, at first sight," adds this physiologist, "seems disproved, by the circumstance of the apex striking against the left nipple, and consequently, appearing elongated,—a circumstance, however, attributable to the double impetus of the blood flowing into the auricles and expelled from the ventricles, by which double impetus the heart must be driven against that part of the ribs."

Besides the heart as the great moving power, other *secondary* powers exist; such are the *arteries*, having a muscular coat, being irritable, and being so well supplied with nerves in the lower part of the abdomen: the *veins* are added to these, since from the circumstances of these performing vital functions in the liver and placenta, we must be convinced that they have vital powers. Besides, there is a muscular layer in the extreme veins near the heart. Blumenbach, it would appear, is of the opinion, that the progression of the blood in the arteries is a kind of *oscillation*. What is called the *venous pulse*, Blumenbach states to be corresponding to respiration, and not to the action of the heart.

In the notes to this section, by Dr. Elliotson, we have presented to us a brief, but full, outline, of all that has been said upon the actions of the heart, and upon the irritability of arteries; also upon the structure of the hearts of different animals. The note K we must introduce.

"It would not be right to terminate this section without a note upon the discovery of the circulation of the blood; a truth of which the ancients are thought to have remained ignorant, from finding the arteries empty after death, but it was known that these contained blood during life. The discovery was made by our countryman, Dr. Harvey, Physician to St. Bartholomew's Hospital, and promulgated by him, at the age of forty-one, in an anatomical and surgical course of lectures at the College of Physicians, in 1619. He is entitled to the glory of having made it, says Hume, 'by reasoning alone, without any mixture of accident.' He informed Bayle, that he was led to it by reflecting on the arrangement of the valves of the heart and veins, as exhibited by his master Fabricius. Nothing, he knew, was planned in vain, and they clearly allowed a fluid to pass but one way. By this argument, and the fact of a ligature upon an artery causing the blood to accumulate in it on the side *nearest* the heart, and, upon a *vein*, *beyond* the ligature; and that animals bleed to death by wounds in arteries or veins, he chiefly established his doctrine. After his time, it was demonstrated with the microscope in cold-blooded animals. His immediate reward was general ridicule and abuse, and a *great* diminution of his practice; and no physician in Europe, who, at the time, had reached forty years of age, ever, to the end of life, adopted his doctrine of the circulation of the blood. (Hume's History, chap. 62.) When the truth could be denied no longer, he was pronounced a plagiarist; the circulation was declared to have been known to Plato, nay, more, to King Solomon. The circulation through the lungs had certainly been imagined by Servetus, a Spanish physician, who was slowly burnt to death by Calvin, for not being of the same opinion as himself upon a point in divinity."

This interesting statement should be a warning to those who oppose every thing that is new: and who, because a matter was not found out before, very coolly condemn it. It also is a verification of the well-known observation of Locke:—"Truth scarce ever yet carried it by vote any where, at its

first appearance. New opinions are always suspected, and usually opposed, without any other reason, than because they are not common. But truth, like gold, is not the less so for being newly brought out of the mine. 'Tis trial and examination must give it price, and not any antique fashion: and though it be not yet current by the public stamp, yet it may, for all that, be as old as nature, and certainly not the less genuine."

With respect to animal heat, which forms the subject matter of the tenth section, we are informed that Haller maintained, that man cannot live in a temperature exceeding his own: an assertion now completely disproved. Man, indeed, can live in every climate: we see him in the Torrid and in the Frigid Zone. Blumenbach's explanation of the equable temperature of the body in all countries, is somewhat similar to that of Dr. Crawford's, namely, that oxygen becomes solidified, is carried through the system, acquires carbon in the small vessels, and thus sets free much of the latent heat which it had received. Besides this cause, our physiologist mentions two others, namely, the *corium* covering the body, and the *alimentary canal*, both of which, abundantly supplied with blood-vessels, seem to be almost as subsidiary lungs; and mentions cases where the lungs have been almost totally consumed, and yet the patients have existed: remember, says he, the coldness of the dog's nose; the burning, at one time of the cheeks, and, at another, of the palms of the hands, in hectic fever.

In the 12th section, Blumenbach proceeds to the consideration of the functions, by which mind and body are connected, and hence called *animal*; the organs of these being the brain, the spinal marrow, together with the nerves; the functions themselves being divisible into two principal classes, *sensorial* and *nervous*; "the former comprehending all excepting the nerves and their immediate origin; all that serves more directly as the connexion between the office of the nerves and the faculties of the mind."

Blumenbach notices the motion of the brain, which he maintains, is correspondent to respiration: and states a fact strikingly illustrative. p. 192.

As a proof of the manly intrepidity of Blumenbach, we may quote the following passage; "the spinal marrow is continuous with the brain, and may be said either to spring from the brain, as from a root, or, on the contrary, to *terminate in it*, and grow into its substance." And in support of the latter opinion, Gall is quoted. This seems to us manly: and it will gain for its author fame, when many physiologists, infinitely inferior to the one before us, who have refused to do justice to Gall for his discoveries, will be remembered, if at all, as the creatures of prejudice and the enemies of truth.

Speaking of the dissections of living animals, with the view of discovering the nerves, our physiologist makes some remarks which Magendie, Fleurens, Orlando, and other immolators at the altar of experiment (this seems scarcely a right name) would do well to remember.

"I am every day more convinced, that much caution and practice, and repetition of the same experiments in many different kinds of animals, are necessary in establishing the laws of physiology from dissections of living animals. To adduce the example of the supposed feeling of the medulla, I have found different results in many mammalia and birds. Many allowed the medulla to be destroyed without evincing any symptom of pain: others were convulsed, and cried out on the approach of the instrument. The latter might be agitated from the dread of fresh torment, on seeing the knife; and the former, having suffered great torture, might have been insensible to the less violent irritation of the medulla, even though it be endowed with nerves."

At the 221st page we have the following note, which we think conclusive upon this mode of experimenting.

"Fontana says, that after removing the brain of a turtle, and entirely emptying the cranium, the animal lived six months, and walked as before. M. Rolando attempted the experiment repeatedly, but the animal always died as soon as a cut was made behind the cerebellum. M. Rolando says, 'he made innumerable experiments upon goats, lambs, pigs, deer, dogs, cats, and guineapigs, to ascertain the results of lesion of the tubercles, and parts near the optic thalami, but rarely obtained the same results.' M. Rolando says, that lesion of the thalami optici causes convulsions, M. Fleurens denies it (Gall, l. c. vi. p. 191.) M. Rolando found an unsteadiness, like that of intoxication, follow the removal of two-thirds of the lobes of the cerebrum in a chicken. M. Fleurens declares he must have wounded the cerebellum. M. Fleurens protests that the experiments of M. Rolando are contradictory to each other. (p. 215.) And after finding a chicken walk, fly, and swallow, shake its wings, and clean them with its beak, subsequently to losing the hemispheres of its brain, infers, that these are the residence of the understanding and feelings: the cerebellum, according to him, is destined to balance, to regulate motion; yet birds, after losing these parts, pecked and clawed their enemies, and perched.' (p. 266.) Mr. Rolando considers muscular action to depend upon the cerebellum, yet Magendie found animals perform regular motions after losing this part."

Speaking of the origin of the nerves, Blumenbach states, "some nerves, however, may be more properly considered as *uniting* with the brain and spinal marrow, than *springing* from them." This observation we have noticed with the view of endeavouring to give to every individual his due. Gall was the first who showed that the nerves, and spinal marrow only *communicate* with the brain; and this doctrine, though taught by him with the utmost clearness, is so far unknown, that a lecturer on anatomy has of late, so it has been stated to us, been claiming to himself the important discovery, that the sympathetic does not arise from the two twigs said to give origin to it, but that these are merely *communicating* branches. It is true, as Dr. Armstrong has observed, that two astronomers (unknown to each other,) in different countries, may see the same stars; so it may be with this anatomist and Gall: but the priority of observation surely belongs to the latter individual. Indeed, what is more, Bichat makes an evident distinction between the *cerebral* and *ganglionic* system. The former, according to him, presiding over animal life; the latter over organic; because this latter system belongs chiefly to the involuntary functions, the ganglionic nerves being given to those organs over which the will has little or no power.

The remarks of Blumenbach on the VOLUNTARY MOTIONS are characterized by the same simplicity and acumen as we have seen throughout the parts of his work already noticed. He states the common division into voluntary and involuntary motions, but wisely observes:—

"If this division is narrowly examined, it will be found embarrassed by so many difficulties, that the limits of each class cannot be well determined. For, on the one hand, few functions can be termed truly involuntary, especially if we consider the connexion of the imagination and passions with the will. Again, on the other hand, there are few voluntary motions that may not be rendered involuntary by the force of habit, whose influence upon our animal motions is immense. Of the latter description are those muscular motions, which, although generally voluntary, take place, under certain circumstances, without the knowledge of the mind, or even in opposition to its endeavours. On the contrary, some muscles, which are almost always obedient to the will, cease, under some circumstances, to be so: an instance of this exists in the difficulty which we experience in attempting to move the hand

and the foot of the *same* side in *different* directions, and in all those motions which, although voluntary and perfectly easy if produced separately, are found very difficult if attempted together."

Drs. Baynard and Cheyne saw an English officer, who could stop the action of his heart and arteries at pleasure. Rumination being possessed by some individuals, shows that the action of the stomach is sometimes voluntary.

These remarks and circumstances have been brought before the reader, in order that stickling for terms might not be made use of, as so frequently happens, as a barrier against the progress of truth. The more our knowledge extends, and the more we reflect on that knowledge, the more do we discover the necessity of not being positive in our opinions, and of not being attached too strongly to particular terms. Dr. Elliotson, however, has made an attempt to define voluntary and involuntary muscles.

"Those muscles, I conceive, are called voluntary, which we have ordinarily the power of directly contracting: those involuntary, which we have not ordinarily the power of directly contracting. These two definitions appear to me unexceptionable."

Part of the note A to this section, by Dr. Elliotson, is so interesting, that we shall present it to our readers.

"Prevost and Dumas assert, that the muscular fibres, straight while at rest, approximate each other at intervals, under contraction, so as to acquire a zigzag course (~~~~~), and shorten the distance of their two extreme points. They ascertain satisfactorily, that during contraction no increase of volume is acquired. If muscles, while the fibres are straight, are stretched still more, as continually happens in the muscular coats of cavities, the subsequent shrinking to the original dimensions, is unattended by the zigzag appearance. Nervous filaments, they also assert, go perpendicularly to the muscular fibre at the very points where the angles are formed under the zigzag contraction, and yet not to terminate there or unite with the muscular fibres, but to return or anastomose with other nerves. The approximation of the nervous filaments to each other is thought to draw the muscular fibres into angles, and thus be the cause of muscular contraction. The approximation of the nervous filaments is considered an electric phenomenon. Electricity will effect it, and in whatever way it is effected, electric appearances are said always to be discoverable.

"Muscular power is no where more displayed than in some fish. 'I have seen,' says Sir Gilbert Blane, 'the sword of a sword-fish sticking in a plank which it had penetrated from side to side; and when it is considered that the animal was then moving through a medium even a thousand times more dense than that through which a bird cleaves its course at different heights of the atmosphere, and that this was performed in the same direction with the ship, what a conception do we form of this display of muscular power! Muscular strength is proportionably much greater in smaller animals. A flea can draw from seventy to eighty times its own weight, whereas a horse cannot draw with ease more than three times its own weight.'"

The next section is on Sleep, which Blumenbach considers to be dependent upon a diminution of the influx of blood to the brain. Dr. Elliotson differs from his friend, and thinks that this alteration in the circulation is not a cause, but a consequence. Taking this view, we can explain how sleep is dependent upon the weariness of the brain: it, like every other organ of the body, if, by stimulus, excited to increased action, must have a time of repose. "The case of the brain is analogous," says Dr. Elliotson, "and when, after its daily activity, it falls asleep, the diminution of its circulation consequently ensues. The influence of sleep upon the cerebral circulation is shown by the headach and other marks of congestion which follow too much sleep. Boerhave mentions a physician, who took a fancy that sleep was the natural state of man, and so slept eighteen out of the twenty-four hours, till he died of apoplexy. The horizontal posture will

not explain these ill effects, because persons with spinal disease will lie a year upon the back without them.

Dr. Elliotson then states some facts respecting the duration of sleep; explains somnambulism, and gives a short, but pleasing account of animal magnetism.

There is one circumstance connected with the last-mentioned subject, which is, that men of the greatest talent, Georget, Hufeland, Treviranus, Oken, Kieser, Carus, believe in it. This we have noticed, because it seems so much the vogue, in the present day, to approve or disapprove of doctrines, because Mr. Abernethy, or some other man of note, believes or disbelieves them. Great names can be brought forward in support of the most ridiculous hypotheses: indeed, there is no opinion, however foolish, but has had some philosopher to support it. Our favourite motto is "*res non verba quæso*." Indeed, we despise that submission of the understanding before the shrine of mere human opinion; the majesty of facts is the only one before which we can bow; we hold no man master—the *ὁ Φαί* will no longer do.

Besides *animal* powers, the loss of which sleep repairs, we have *natural* powers, which are kept in existence by a due supply of substances placed in certain relations to our system as to nourish the same; substances taken *en masse* constituting what is called food. This supply of food being, according to the constitution of our nature, absolutely necessary, the Creator has wisely implanted the feelings of HUNGER and THIRST, which impel us to seek the due supply.

Blumenbach, like every reasonable physiologist, maintains that man is *omnivorous*. Still, though man is omnivorous, he can live upon one thing only: thus, "the Nomadic Moors have scarcely any other food than gum senega; the inhabitants of Kamtschatka, and many other shores, scarcely any other than fish: the shepherds in the province of Caracas in South America, on the banks of the Oronoko, and even the Morlachs in Europe, live almost entirely on flesh." Some very striking facts relating to this subject are given in a note by the translator, 308, 309, 310, 311.

Having considered food generally, Blumenbach proceeds to consider those processes by which the food taken is rendered subservient to the uses of the animal machine. Of these, MASTICATION and DEGLUTITION are the two first mentioned. Of deglutition, Blumenbach gives a short but neat description, p. 313.

"The lower jaw is connected with the skull by a remarkable articulation, which holds a middle rank between arthrodia and ginglymus, and, being supplied with two cartilaginous menisci of considerable strength, has easy motion in every direction.

"The digaster, assisted somewhat by the geniohyoidei and mylohyoidei muscles, draws the lower jaw down, when we open the mouth.

"The masseters and temporal chiefly raise it again when we bite off any thing, and are most powerfully contracted when we brake hard substances.

"Its lateral motions are accomplished by the internal and external pterygoid.

"The latter can also draw it forwards."

And at the next page, Blumenbach adds,—

"The mechanism of deglutition, although very complicated, and performed by the united powers of many very different parts, amounts to this. The tongue being drawn towards its root, swelling and growing rigid, receives the bolus of food upon its dorsum, which is drawn into a hollow form. The bolus is then rolled into the isthmus of the fauces, and caught with a curious and rather violent effort by the infundibulum of the pharynx, which is enlarged and in some measure drawn forward

to receive it. The three constrictor muscles of the pharynx drive it into the œsophagus. These motions are all performed in very rapid succession, and require but a short space of time.

The next process is **DIGESTION**, the food having been received into the *stomach*. This organ is characterized very conspicuously by its being abundantly supplied with nerves, both from the *ganglionic* and from the *cerebral* system; also with blood-vessels. It seems, from the experiments of Dr. Philip, and the observations of Sir Everard Home, that the process of digestion goes on principally in the cardiac portion of the stomach; and, from the experiments of Dr. Prout, that muriatic acid is formed during the digestive process. Tiedemann and Gmelin maintain the same opinion.

Dr. Elliotson, in a note to this section, gives a short account of the stomachs of different animals; and also some new remarks on vomiting, to which we refer our readers.

Respecting the **PANCREATIC JUICE**, Blumenbach states, that "The excretion of this fluid is augmented by the same causes which affect that of saliva, pressure and stimulus;" and that "Its use is to dissolve the chyme, especially if imperfectly digested in the stomach, and at all times, by its great abundance, to assimilate the chyme more to the nature of the fluids, and render it fitter for chylicification." Tiedemann and Gmelin, Dr. Elliotson states in a note, maintain that "this fluid animalizes the unazotised principles of vegetable food:" and adds, that "it is certainly much larger proportionately in herbivorous than in carnivorous animals."

There is a very curious note to this section, illustrative of the idea, that some animals have many lives.

"Brunner, about 160 years ago, removed almost the whole pancreas from dogs, and tied and cut away portions of the duct; and they lived apparently as well as before. From one he was not contented with removing the spleen at one time and the pancreas at another, after which the poor animal *pancreatice valebat*; but, to render it celebrated for experiments, he on a third occasion laid bare the intestines and wounded them for an inch and a half, sewed up the wound, made a suture in the abdominal parietes so badly that the intestines were found hanging out on the ground one morning, purple and cold, and then allowed the animal to lick the wound into healing. He also performed the operation for aneurism in the artery of its hind leg, and paracentesis of its chest, injecting a quantity of milk into the pleura and pumping it out again. This even was not enough for the gentle Brunner; he gave the dog such a dose of opium, when it had recovered from the operation on the spleen, that it was seized with tetanus. But this also it got the better of, and lived upwards of three pleasant months with its master, '*gratus mihi fuit hospes*,' after all these indulgences, and was at last lost in a crowd; stolen, no doubt, because '*celebris ob experimentorum multitudinem,—vivum philosophiæ experimentalis exemplum, et splene mutilus, variis cicatricibus notabilis*.' Brunner offered any money for it again, but to no purpose."

As a matter of great importance in the process of digestion, the **BILE** claims the consideration of every physiologist. The deficiency and the excess of this secretion, occasioning so many and so distressing symptoms, render a knowledge of the nature of the fluid itself, of the organ producing it, and of the powers influencing it, highly important. As to the opinion whether the bile be secreted from arterial or venous blood, Blumenbach remarks:—

"Although the former opinion is countenanced by the analogy of the other secretions which depend upon arterial blood, nevertheless more accurate investigation proves that the greater part, if not the whole, of the biliary secretion is venous.

"With respect to arguments derived from analogy, the vena portæ, resembling arteries in its distribution, may likewise bear a resemblance to them in function. Besides, the liver is analogous to the lungs, in which the great pulmonary vessels are intended for their function, and the bronchial arteries for their nourishment; and if we are not greatly mistaken, the use of the hepatic artery is similar. We would, however, by no means completely deny its importance in the secretion of bile, but must regard it as inconsiderable, adventitious, and not well established."

These observations are worthy of their source. How contrary to the childish observations of an individual, who some how or other, has attained as a medical practitioner a fame, which seems to have no other origins than the efficacy of blue-pill and the eccentricity of his manner. This individual tells us with an air, as if giving birth to wisdom itself, as if a new Minerva was about to spring from his brains, "the function of the liver is a strange thing: it is what does not take place in any other part of the body." Surely this is the mountain labouring to bring forth a mouse. And then, with equal wisdom, brings forth another child of his own creation, and well worthy of its creator; namely, that bile is secreted from the arterial blood: and this doctrine, be it observed, the acute physiologist founds on *one* fact: and that fact, a *lusus nature*! Can it be believed that this man talks sometimes about Bacon, the author of the grand system of induction? A single fact to establish a doctrine! This is attempting "to build a ship with materials not sufficient to make a boat." No wonder that hypotheses should abound, when such a person sets such an example!

In a note to this section, Dr. Elliotson gives the results of the experiments of Dr. Blundel and others on the effects of tying the ductus communis choledochus. To the book itself we refer our readers, extracting, however, the following interesting portion:—

"The hypothesis, that one great use of the liver was, like that of the lungs, to remove carbon from the system, with this difference, that the alteration of the capacity of the air caused a reception of caloric into the blood, in the case of the lungs, while the hepatic excretion takes place without introduction of caloric,—was, I recollect, a great favourite with me when a student, principally from the facts that a supply of venous blood—blood which has been used by the system, runs to both liver and lungs, and to no other organs; that the higher the temperature the less carbon passed off by the lungs (less caloric being demanded by the body,) and the more abundant, or more acrid, became the bile; so that bilious diseases are most prevalent in hot seasons and climates. The Heidelberg Professors have adduced many arguments to the same effect. In the fœtus, for whose temperature the mother's heat must be sufficient, the lungs perform no function, but the liver is of great size, and bile is secreted abundantly, so that the meconium accumulates considerably during the latter months of pregnancy. We shall see, indeed, that at the very time the functions of the lungs suddenly begin, at birth, the liver suddenly loses much of its supply of blood. Warm-blooded animals with large lungs, living in the air, have the liver proportionally smaller than those which live partly in water; in cold-blooded animals, and reptiles, which have lungs with such large cells as but slightly to decarbonise the blood; in fish, which get rid of carbon, but slowly by the gills; and in the mollusca, which decarbonise still more slowly by gills or lungs,—the liver is proportionally large. More blood flows to the liver, accordingly as the lungs are less active organs. In the mammalia and birds it receives the blood of only the stomach, intestines, spleen, and pancreas; but in the cold-blooded, of many other parts; in the tortoise, of the hind legs, pelvis, tail, and vena azygos; in serpents, of the right renal, and all the intercostal veins; in fish, of the renal veins, the tail, and genitals. They assert, that in pneumonia and phthisis more bile is secreted, and in the *blue disease*, and other affections of the heart, that the liver is enlarged. The constituents of the bile contain a large quantity of carbon, which is chiefly in union with hydrogen, and under the form of resin or fatty matter, and resin is most abundant

in the bile of herbivorous animals, whose food contains a very large proportion of carbon and hydrogen. In the lungs the carbon may be said to be burnt, whence animal heat; in the abdomen it passes off still combustible."

Blumenbach proceeds in the next section to the use of the SPLEEN; that which has had so many uses, but all for no use. He considers the two hypotheses as most worthy of notice to be these: that which considers the spleen as a diverticulum to the arterial blood destined to form the gastric juice; the other, that it affords a short passage to a great portion of our drink from the stomach into the mass of blood. This is all that a candid physiologist can at present say.

The uses of the OMENTUM are then taken notice of. Besides the commonly stated uses, lubricating the intestines and assisting their movements, Blumenbach states, "There is another two-fold office attributed with great probability to the omentum, viz. that of facilitating the dilation of the viscera, to which it is contiguous, and of acting as a diverticulum to their blood during their state of vacuity."

Blumenbach next describes the uses of the INTESTINES, after giving a short but clear account of their structure. He proves by a quotation that Fallopius was the first discoverer of the *valve* of the colon.—(See note. S. p. 354.) One circumstance he notices which we shall mention. It is, that the large intestines, of which the peristaltic motion is weak, are so placed, as to experience the pressure of the abdominal parietes, this compensating for the other circumstance: a fact, showing physiologically the importance of foot exercise.

In speaking of the ABSORBENT SYSTEM, which occupies the XXIX. Section, Blumenbach divides it into four parts, the *lacteal* and *lymphatic* vessels, *conglobate glands* and the *thoracic duct*, each of which he describes succinctly. In the note (D) to this section, we have presented to us, by Dr. Elliotson, a brief view of the experiments on absorption. To this note we refer our readers, and also to the experiments of Dr. Barry on absorption, which as matters of physiology, are highly instructive: and, as all truth is important, when our views on this point are more clear, our practice, perhaps, on some cases of disease of the absorbent system, may be less empirical.

The next subject is SANGUIFICATION, or the conversion or assimilation of the chyle to the blood, which is favoured by the windings in the mesenteric and other conglobate glands, and also by the slow, and as Blumenbach styles it, "the almost stillatitious manner in which the chyle joins the blood through the last valve of the thoracic duct, these very minute portions being thus the more intimately combined with the blood."

The chyle is often found in the other fluids of the body. Dr. Elliotson in a note says—

"I once saw a young married woman whose urine contained very large coagula of chyle. She always dined at noon. In the evening the coagula were white; in the morning pale with pink streaks. After fasting twenty-four hours at my request, the coagula still appeared in the urine, extremely pale, and showing more pink streaks. She had been some months in this way, was in very fair health, and had a great appetite, and perhaps some other general symptoms of diabetes; but there was no sugar in the urine. Notwithstanding the fluid discharged seemed to present as much coagulum as urine, the quantity of chyle proved on drying to be very minute, and from its looseness to have been extremely distended by the urine. As this was a state of disease, I draw

no inference from the case respecting the time necessary for the change of chyle to blood. She would not allow me to take any blood from the arm for observation.

"I know that similar cases have been seen by Dr. Prout and other gentlemen now practising in London, and there may be several on record, but the only one of which I have read is quoted in Shenkius. 'I saw,' says the author whom he quotes, (in Castro Itri, Comitatus, Sundorum,) 'a young man, thirty years of age, who daily made a considerable quantity of urine, depositing a white substance like the curd of milk, sufficient to fill a common *pot de chambre*, besides the urine which was above it. He was in perfect health, not experiencing the slightest ill effect.'

"Shenkius is generally thought a credulous collector of incredible cases, and no doubt some of his histories as well as of his opinions are ridiculous. But careful modern observation discovers facts precisely similar to the greater number that he has collected. I should have doubted the history just related, more especially the good health of the patient, had not the case of the woman occurred to me. He gives some instances of black urine made by persons in perfect health, and Dr. Marcet has published two such in the *Transactions of the Medical and Chirurgical Society*. Dr. Prout showed me a specimen of urine from one of these."

The next step is NUTRITION, which Blumenbach says "is the grandest gift of Nature, and the common and highest prerogative of the animal and vegetable kingdoms, by which they, beyond measure, surpass, even at first sight, all human machines and automats."

Respecting the *reproductive power*, which forms again parts that have been destroyed, and which is continually effecting changes in the structure of the machine, Blumenbach, from his experiments on man and warm-blooded animals, has been led to this conclusion, that "it appears completely bestowed upon scarcely any similar solid part which possesses any vital power BESIDES CONTRACTILITY, i. e. irritability, sensibility, or a *vita propria*."

The power of reproduction is much more considerable in animals than in man. Our physiologist observed the reproduction of the whole head with its four horns in a snail, and the complete eye—cornea, iris, crystalline lens, &c. in a water-newt. Besides reproduction, reparation is also proportionably great. Brunner's dog testifies to this.

We now have arrived at the third division of the fluids of the body by this celebrated physiologist; namely, the SECRETED, which he ushers in by some general remarks on the SECRETIONS. Of the fluids themselves he gives an arrangement founded on the degree of difference between them and the blood from which they are formed. The following is his order: *milk, aqueous fluids*, such as tears, vapour in the cellular interstices, cavities of the abdomen and thorax, the fluid of the pericardium and of the ventricles of the brain; the liquor amnii, and the urine. Next come the *salivary fluids*; next, the *mucous*, lining the cavities of the organs performing the natural and genital functions, and likewise the tract of the nostrils, larynx, and trachea: the *adipose*, as the common fat, medulla of the bones, grease of the skin, the secretion of the corona glandis, and of the external female genitals; and, finally, the truly *serous* or albuminous, as the fluid of the ovarian vesicles of De Graaf, and the liquor of the prostate. "The *semen virile* and the *bile* are each *sui generis*."

The modes of secretion are then stated; the most simple being diapedesis or transudation; the next more complicated, secretion by *glands*. The following passage is worthy of notice:—

"Properly speaking, the *conglomerate* (as they are called to distinguish them

from the lymphatic conglobate) are the only true secreting organs: such as the salivary and lachrymal glands, the pancreas and breasts. They are provided with an excretory duct coming immediately from the large lobes, which are composed of others, smaller, and whose interior structure was once the source of warm disputes in the schools of medicine. Malpighi considered the milialy globules, which are easily discoverable in most glands, as acini, according to his expression, internally excavated. Ruysch, on the contrary, contended that these supposed hollow acini were nothing more than glomerules of blood-vessels,—an opinion shown to be far more consistent with nature by microscopical observation and the effects of minute injection.

“The structure of some secreting organs, especially of the liver and kidneys, the latter of which strikingly exhibit the glomerules of Ruysch or the acini of Malpighi, are not, excepting in their peculiar parenchyma, very dissimilar from this structure, and indeed throw considerable light upon the question. On the outer part of these, small twigs arise from the sides of the capillary arteries and run into vascular glomerules, hanging from them like granules as from stalks: from these arterial glomerules spring both very minute colourless secreting vessels whose origin from the extremities of arteries were formerly alluded to (92), and the radicles of veins into which the arteries are continued, and which convey back into the venous trunks the remaining blood deprived of the secreted fluid.”

The organization of the testes is peculiar to itself.

As to the absolute cause of most secretions, Blumenbach rightly refers it to the intimate structure of the secreting organs, and also to the parenchyma, which, he thinks, is possessed of a *vita propria*, “a peculiar species of vitality distinct from the common vital powers of contractility, irritability, and sensibility.”

Fat is next considered. This, in the form of drops, is deposited between the lamina of the mucous tela. The two theories respecting the formation of fat are mentioned: namely, that it is formed by peculiar glands, and that it merely transudes from the arteries. Blumenbach inclines to the latter opinion, because fat sometimes exists as a diseased formation in parts naturally destitute of it.

The EXCREMENTITIOUS fluids, or the excrements of digestion, as Blumenbach calls them, are of two kinds, the one exhaled by perspiration; the other, the urine. Having described the kidneys and the bladder, Blumenbach states the way by which the urine is expelled; “The bladder is evacuated from the contraction of the sphincter being overcome by the action of the detrusor urinæ and by the pressure of the abdomen. To these in men is superadded the action of the accelerators, which force out even the drops of urine remaining in the bulb of the urethra.”

We now take leave of the fluids of the body, and are introduced in the XXXV. Section, to the GENERAL DIFFERENCES OF THE SEXES. These are briefly stated; those peculiarly claiming the attention being the *particular* differences, namely, the genital organs, being in man fitted for impregnating, in woman for conceiving. This section is enriched by Dr. Elliotson's notes: first, upon Sir Everard Home's hypothesis, that the sex is not determined at the first formation of the individual; next, upon the difference of form, mental powers, &c. of men and women; and, finally, on hermaphrodites and malformations in general. In these notes there is abundant and curious information; they testify to the research of the writer, and show, by the arrangement of the facts, his powers of so ordering his thoughts, that one is necessarily connected with the other.

Leaving these notes to be perused in the work itself, we proceed to the

consideration of the next section; namely, THE GENITAL FUNCTION IN MAN. The observation of Blumenbach upon the situation and descent of the testicles of the fœtus are so acute, somewhat novel, and so clear, that they may justly be quoted.

"On opening the lower part of the abdomen of a young fœtus, there appears in each groin, at the ring of the oblique muscles, a very small opening in the peritonæum, leading downwards to a *narrow passage* which perforates the ring, and runs to a peculiar sac that is extended beyond the abdominal cavity towards the scrotum, is interwoven with cellular fibres, and destined for the future reception of the testicle.

"At the posterior margin of this abdominal opening, there is sent off another process of peritonæum, running upwards, and appearing, in the young fœtus, little more than a longitudinal fold, from the base of which arises a small cylinder, or rather an inverted cone, that terminates above in a globular sac, containing the testis and epididymis, so that the testis, at first sight, resembles a small berry resting on its stalk, and appears hanging, like the liver or spleen, into the abdomen.

"The vessels, which afterwards constitute the spermatic chord, are seen running beneath the very delicate and pellucid peritonæum; the spermatic artery and vein descending along the sides of the spine, and the vas deferens passing inwards, in the loose cellular substance behind the peritonæum, towards the neck of the bladder. They enter the testis in the fold of peritonæum just mentioned.

"After about the middle period of pregnancy, the testis gradually descends and approaches the narrow passage before spoken of (511), the fold of peritonæum and its cylinder becoming at the same time bent down, until it lies directly over the opening of the passage.

"The testis being now ready for descent, the opening which was hitherto small, becomes dilated, so as to allow the organ to pass it, the abdominal ring, and the whole passage, and to descend into the bulbous sac (511); after this occurrence, the opening soon becomes strongly closed and even grows together, leaving scarcely any vestige of itself in infancy.

"In proportion to the slowness with which the testis proceeded towards the opening, does its transit through the abdominal passage appear rapid, and, as it were, instantaneous. It is common to find the testis in mature fœtuses either lying over the peritoneal opening, or, having passed this, resting in the groin; but I have once only met with the testis, and then it happened to be the right and in a twin fœtus, at the very time when it was adhering, and in a manner strangled, in the middle of the passage, being just about to enter the sac; in this instance, the left testis had passed the abdominal canal and was already in the sac, and the abdominal opening of the same side was perfectly closed.

"This remarkable passage of the testis from the abdomen through the groin is limited to no period, but would seem to occur generally about the last month of pregnancy; the testicles are found, however, not very rarely in the abdomen or the upper portion of the groin at birth. For they have always another part of their course to finish, after leaving the abdomen, viz. to descend, together with their sac, from the groin into the scrotum."

This we present to our readers as a master-piece in description: as an example of correct writing, which medical authors would do well to imitate. It is one of those passages which will bear Addison's test of a good style, namely, that no addition, no subtraction can be made to or from it.

Blumenbach doubts whether genuine semen is ever absorbed during health. Nocturnal pollutions, as they are improperly called, our physiologist considers as a natural excretion intended to liberate the system from the otherwise urgent superfluous semen. The laconic brevity of the following passage is great.

"The emission of semen is *excited* by its abundance in the vesicles and by sexual instinct; it is *effected* by the violent tentigo which obstructs the course of the urine,

and, as it were, throws the way open for the semen; by a kind of spasmodic contraction of the vesiculæ seminales; by a convulsion of the levatores ani, and of the acceleratores urinæ; and by a succussion of the whole system, short and less violent, though almost of an epileptic nature and followed by depression of strength."

Some excellent notes are affixed to this section; our limits oblige us to refrain from quoting them.

The GENITAL FUNCTION OF WOMAN is next brought forward. The description of the parts concerned is brief and clear, and those referring to the muscularity of the uterus we shall quote.

"I have never yet discovered a true muscular fibre in any human uterus which I have dissected, whether impregnated or unimpregnated, recent or prepared; but it must be allowed by those who maintain the muscularity of the uterus, that the fibres, which they call muscular, have qualities very different from those of all others in the system, especially since they themselves entertain doubts of the existence of nerves in the substance of the uterus, without which, one cannot imagine a true muscle. (302) I am daily more convinced, that the uterus has no true irritability, (301) but, if any part of the body has, a *vita propria*, (42) perfectly correspondent with the peculiar motions and functions of the uterus, which are not referable to any properties common to the similar parts, (39-41) and which appeared to the ancient physicians and philosophers so peculiar, that the uterus was by them denominated, an animal within an animal."

Blumenbach refers to female circumcision, and Dr. Elliotson gives a note on this subject which may be introduced to the reader's notice, not with the view of imitation, but simply to show the powers of nature, and the punishments to which jealousy subjects individuals.

"This custom is mentioned even by Strabo. (p. 284.) Burckhardt states that, 'the daughters of the Arabs, Ababde and Djaafere, who are of Arabian origin, and inhabit the western bank of the Nile, from Thebes, as high as the cataracts, and generally those of all the people to the south of Kenne and Esne, as far as Sennaar, undergo circumcision, or rather excision of the clitoris, at the age of from three to six years.' The healing of the wound is contrived to close the genitals, excepting at one point for the passage of the urine, and as the adhesions are not broken through till the day before marriage, and then in the presence and with the assistance of the intended bridegroom himself, no doubts of the fair's virginity can harass his breast.

"The same traveller, as well as Browne and Frank, relates that many slave girls have their genitals sewn up, and, like eunuchs, become more valuable on account of their unfitness for sexual connexion. 'Mihi contigit,' says he, *nigram quandam puellam, quæ hanc operationem subierat, inspicere. Labia pudendi acu et filo consuta mihi plane detecta fuere, foramine angusto in meatum urinæ relicto.*' He adds, 'Apud Esne, Siout, et Cairo, tonsores sunt, qui obstructionem novacula amovent, sed vulnus haud raro lethale evenit.'"

From a note given by Dr. Elliotson, we find that Mr. C. Bell maintains the muscularity of the uterus: and his views upon this point are quoted from the Med. Chir. Trans.

Our Physiologist devotes his 38th section to the MENSTRUUM, a fluid poured out from the uterus, monthly, during about 30 years; "a law," as he says, "imposed upon no other species of animal." "The proximate cause is supposed to be a *local* plethoric congestion. The concluding remarks are well timed. "It will be better to confess our ignorance of the cause of its periodical return, than to indulge in vain hypotheses; for all the periodical phenomena of health and disease, *that continue more than twenty-four hours*, have hitherto appeared among the mysteries of animal nature."

In the notes to this section, some very interesting facts are stated with regard to menstruation; especially those related by Dr. Gall, which are deserving the attention of every practitioner.

It was the ordination of things of old, by the Creator, that from pairs of individual species, the multiplication of the species should take place. In fulfilling this, his will, he implanted the sexual desire, which excites the male and female to bring themselves into such relations one to the other, that the effect shall be a new being. With respect to the effect of the part, called the *placenta*, in nourishing this new being, Blumenbach has the following observations.

“After all, the truth appears to be this,—that no anastomosis exists between the blood-vessels of the uterus and of the chord, but that the oxygenised blood which proceeds from the uterus to the portion of the placenta that was originally the decidua crassa, is absorbed by the extreme radicles of the umbilical vein distributed upon the mossy chorion, and carried to the great venous trunk of the chord; while the carbonised blood returning from the foetus, through the umbilical arteries, being poured in the same manner into the substance of the placenta, is absorbed by the venous radicles of the uterine portion of the placenta, and returned to the uterus.”

The changes in the uterus after impregnation, during the ten lunar months, are very clearly stated. But to this we cannot do justice, unless we were to quote the whole. The same may be said of the notes, which abound with the most valuable matter, containing the testimonies of different physiologists to the increased action, induced by the excessive redness of the genital organs of the female, during heat. We are, in addition, presented with facts, showing that impregnation may take place without the hymen being ruptured; with the experiments of Dr. Haighton, Dr. Blundel, and others.

There is one idea that we cannot pass by without notice: this is, that different conceptions may occur from the repetition of copulation after very short intervals. This is said to be proved by adulterous women, who have brought forth twins resembling different fathers in the colour of their skin; namely, black women who have brought forth a black and a mulatto. Dr. Elliotson gives in note (B) some facts proving the truth of this idea.

The connexion between the uterus and breasts, seems to depend upon the anastomotic connexion between the epigastric and internal mammary artery. This anastomosis, existing in man as well as in women, we might infer, that milk may be afforded, even by males, and Dr. Elliotson gives us some examples in note (C) p. 508—509. Many similar cases with respect to animals are related. An opportunity is afforded in so doing, of sprinkling a little classic salt. “Blumenbach has described a he goat, which it was necessary to milk every other day, for a year; so that, to say with Virgil, *mulgeat hircos* is not tantamount to calling a man a fool.”

Our pathologist, in the next section, rightly observes:—“From what has been said relatively to the functions of the foetus, still contained within its mother, and immersed, as it were, in a warm bath, there must evidently be a considerable difference between its functions, and those of the child that is born, and capable of exerting its will.” The differences are briefly narrated. The great size of the glands is a very conspicuous point of difference between the foetus and the child after birth; and perhaps the investigation of the circumstances therewith connected might lead to some very important conclusions.

This valuable work is concluded by a section on the GROWTH, STATION-

ARY CONDITION, and DECREASE of this being, which, by the processes before-mentioned, has been created. Blumenbach gives a neat description of the gradual and progressive steps through which the human embryo passes: he considers the *commencement of formation* to take place about the third week from conception; the *formation of bone* at the seventh or eighth week. The changes go on till death comes: *death without disease*; the physiological death, the *εὐθανασία*. A curious circumstance is noted by our author, namely, that in the dissection of moribund mammalia, "the struggle of the heart may be perceived, and the right ventricle and auricle are found to live rather longer than the left."

The limit of the natural period of life, Blumenbach acknowledges it is scarcely possible to state, but considers, that a large proportion of Europeans reach their *eighty-fourth* year, and but few exceed this period.

We shall quote our physiologist's concluding period, as we hope it may have the effect of stopping the palsied complaints of some concerning the shortness of human life.

"But, on the whole, notwithstanding the weakness of children, the intemperance of adults, the violence of diseases, the fatality of accidents, and many other circumstances, prevent more than about perhaps seventy-eight persons out of a thousand from dying of old age, without disease; nevertheless, if *human longevity* be compared, *ceteris paribus*, with the duration of the life of any other known animal among the mammalia, we shall find that, of all the unreasonable complaints about the misery of human life, no one is more unfounded than that which we commonly hear respecting the shortness of its duration."

We have thus come to the conclusion of this invaluable work, so far as regards Blumenbach's share in it. We have seen throughout the philosophical physiologist; the modest writer, and the well informed man. We discover a candour, the product of enlightened honesty, throughout: a grasp of mind, that can take in the various particulars necessary to form a proposition: and an acuteness of intellect clever in detecting what pertains to the object in view, from that which does not. We perceive a careful and wise neglect of the egotistical *I*: the subject is the thing to be promoted, not the individual. The lover of truth is associated with the truth he loves: and goes down to posterity, when thus associated, in the best company. When thus linked, indeed, he may say, "*exegi monumentum perennius ære.*" Such will be the case with Blumenbach.

We shall conclude our remarks by recommending this work to every individual in the medical profession. To the practitioner we would recommend it—because he has much knowledge presented to him in a small compass, and in a style, not adorned with the ephemeral flowers of a school boy's flimsiness, but grand in the dignity of its majestic solidity and worth; a style, that will suit the man who husbands his time, and who *thinks*; who delights in food that will afford some nutriment. Besides, there is a spirit gone out into the world; a spirit, which is raising men, and pushing them on in the career of intellect; a spirit which will make its possessor take the practitioner's place, unless the practitioner keeps pace with those now close upon his heels. Mystery will do no longer: practice *must* be founded on science; physiology *must* be understood; and medical practitioners *must* be ready to give a reason for their practice.

To the medical writer we recommend this work as a true specimen of the style in which medical works should be written. We are made angry at perceiving the flimsy productions often presented to our notice; indeed, with many writers, the only aim seems to be to expand into twenty lines,

a thought, which is compressible into twenty words; and thus the time of the reader is sacrificed; the reader seeks a substance and embraces a shadow. Let medical writers study Blumenbach; let them acquire the terse brevity of his style, the manly dignity of his expressions, and then they shall have our praise, and they shall be remembered by posterity. One parting remark.—It would be well before they begin to write at all, if they would scan over the notes of Blumenbach, and see how many works he has perused, how much knowledge he must have accumulated before he wrote.

Finally, to the medical student we present this work with joy. When students ourselves, we adopted the following plan, of the uses of which we are now fully convinced. We read few works, but these were standards. We found from some good and clever medical friend what works are truly useful; what might, as Lord Bacon says, “be chewed and digested.” Having found these, we chewed and digested them, and now find that we have been nourished. One work on one subject well studied will do more for an individual than reading twenty volumes. Reading does not make a work read the reader’s property. It is *thinking*. On physiology, then, as a work capable of affording true nutriment to the medical student, we recommend Blumenbach’s, translated by Dr. Elliotson. Let the student interleave his volume and add his own illustrations; put down his own thoughts; state his own difficulties: and then, after doing this, he will thank us for our advice; will acknowledge us as friends to him, friends to the profession, and friends to human society in general.

We now bid farewell to Blumenbach as *reviewers*, but not as *readers*; and, in bidding farewell, state our hope that, ere long, this work will be seen in the library of every medical student.

Before closing this review it seems necessary that some observations should be made upon the additional matter at the end of the volume given us by Dr. Elliotson. The reader has already been introduced to this individual, and will not tire, we are sure, in having some of Dr. E’s. mental products presented to mind.

To the last section of Blumenbach Dr. E. attaches some notes. He makes some remarks on the changes of the system induced at the period of puberty, and shows, by some facts, how dependent these changes are upon the development of the testes in the male and of the ovaria in the female. The influence is well known as regarding brutes: as every one is aware of the differences induced in them by castration. On the human species the changes are equally clear. In Egypt it is the custom to emasculate boys, whose faces, Burckhardt states, are “almost destitute of flesh, the eyes hollow, the cheek bones prominent, and the whole physiognomy has a skeleton-like appearance.” The operation there is usually performed between between the eighth and twelfth year. Further illustrations are given at p. 530.

With respect to the dependence of the *number* of fœtuses upon the ovaria, the experiment of John Hunter is quoted.

“He took two young sows, in all respects similar to each other, and, after removing an ovarium from one, admitted a boar of the same farrow to each, and allowed them to breed. The perfect sow bred till she was about eight years old,—a period of almost six years, in which time she had thirteen farrows, and in all one hundred and sixty-two pigs; the other bred till she was six years old,—during a space of more than four years, and in that time she had eight farrows and in all seventy-six pigs. Thus it would appear that each ovarium is destined to afford a certain number only of fœtuses, and that the removal of one, although it does not influence the

number of fetuses produced by the other, causes them to be produced in a shorter time."

Dr. Elliotson then proceeds to the examination of the opinion, very generally received, that the sexual desire depends upon the sexual organs. He disputes this and advances an opposite opinion, that this desire is dependent upon the cerebellum; this latter view, from some diligent consideration, we are inclined to adopt, and our reasons cannot be better expressed than in the words of this distinguished physician.

"The sexual organs are usually regarded as the cause of sexual desire. That this is not the case, may be shown by many circumstances. Desire is by no means commensurate with the size of the genitals: even when the genitals are precociously developed desire is sometimes not felt. Desire is often felt after the removal of the testes, and in old age when the genitals are powerless. It must, therefore, depend upon some other part. This part appears to be the cerebellum. Desire is, *ceteris paribus*, naturally strong or weak in the adult, in proportion to the large or small size of the cerebellum, whether of the lobes or the fundamental portion called the vermiform process, which alone exists in birds, amphibia, fish, and insects; whenever I have accurately known the strength of the sexual propensities in either sex, the size of the occiput has without a single exception corresponded. Before puberty the cerebellum is small; its proportion in size to the cerebrum is at birth from one-ninth, to one-twentieth, or even less: in the adult it is as one fifth, or at the least as one-seventh, and acquires its full development between the eighteenth and twenty-sixth years; and the breadth and prominence of the occiput are proportional. In old age, the cerebellum shrinks, and the internal table of the occipital bone following, bony matter is deposited between the two tables, and the bone at the fossæ occipitales becomes much less transparent. Gall possesses old crania in which the cerebellum had returned to the dimensions of infancy, and the occipital fossæ had become shallow. When the cerebellum is precociously developed, desire is felt by the child, even though the genitals are not above the ordinary size. Inflammation and irritation of the cerebellum are found by a multitude of dissections to have existed when great excitement of the genitals occurred before death, and injuries of the cerebellum, at the back of the head, have as frequently occasioned impotence. Desire is much stronger in the males of all species than in the females; and, in general, the cerebellum of the male is larger than of the female,—the distance between the mastoid processes is wider; the back of the neck and head, fuller; indeed the whole is much thicker; and if the brains of the two sexes are placed in water, the larger cerebellum of the male is very conspicuous.

"The sympathy of the cerebellum with the genitals, is the reason of the latter being regarded as the seat of desire. If they are removed, desire is generally extinguished; for the cerebellum is not afterwards developed at puberty, and the back of the head and neck remains small, perhaps smaller than in the female. If one testicle only is removed, Gall has invariably observed, in experiments on rabbits, and some cases in the human subject, that the opposite half of the cerebellum is not developed or shrinks. Removal of both or one testicle after puberty produces sometimes similar effects. On the other hand, morbid irritation of the genitals will sometimes excite intense desire; and, judging from all the other facts, we should say from exciting the cerebellum. In violent sexual excitement, the back of the neck is flushed, and hotter. Some animals feel the sexual desire at certain periods of the year only; and at this time the testes, and in some instances the vesiculæ seminales and prostate gland, enlarge very considerably, as in the male sparrow and frog. Gall found the cerebellum of birds collected at this season, broader and more turgid, and the corresponding prominences of the cranium manifestly greater than in those collected at the beginning of winter.

"The facts adduced by Gall, on these points, in the third volume of his octavo work, are curious and very numerous; and similar ones, without end, may be found in works upon disease, military surgery, and physiology, from ancient times down to Magendie's Journal for January last year. It occasionally happens, that apoplexy or other disease of the cerebellum, is not attended by affections of the genitals; and I am in-

clined to believe, that when no excitement of those organs accompanies the disease of the cerebellum, the disease does not include the vermiform process, which is considered by Gall the fundamental part of the cerebellum, from its being the only part always existing in animals where there is a cerebellum."

Speaking of the longevity of some individuals, Dr. E. states a circumstance regarding Parr, who retained his vigour to a hundred and forty, and died at a hundred and fifty-two, from plethora, induced by a change in his diet.

"At 105, he did penance in a white sheet for an illicit amour, which physiological fact John Taylor the poet, in 1635, immortalized in the following elegant rhymes:—

"Fair Catharine Milton was this beauty bright,
Fair like an angel, but in weight too light,
Whose fervent feature did inflame so far
The ardent fervor of old Thomas Parr,
That for love's satisfaction 'twas thought meet.
He should be purged by standing in a sheet;
Which aged he *one hundred and five* year,
In Aldersbury Bury's church did wear.
Should all that so offend such penance do,
Oh! what a price would linen rise unto,
All would be turn'd to sheets, our shirt and s——k,
Our table linen, very porter's frock,
Would hardly 'scape transforming. *Eccentric Mirror, vol i."*

Thus we are brought to a conclusion of the notes to this work.

It is almost impossible, at times, to trace the series of associated ideas which give rise to a new and beautiful thought. Still sometimes it is possible, and when we can gradually go back, step by step, to the source of our original idea, we feel much delighted. Cannot the reader imagine it to be very natural that, after thus going over the physiology of MAN, the thought, the sublime thought, of viewing man but as a link in the great chain of creation, would arise in the mind. We think so; and this so happened with Dr. Elliotson: for, as the summing up of all this excellent matter, he gives us what we shall express in his own words. "The functions of the human machine having now been fully described, it may be useful to consider it in relation to other systems, and to review the chief varieties in which it appears."

This is an apologue to a very pleasing essay, in which the essayist first ably shows, that the commonly-received notion, about the regular gradation of beings from the great first cause down to inanimate matter, is not true: in other words, that the gradation is not regular, not insensible.

Dr. Elliotson maintains a truth which Nature maintains, and, consequently, what every true philosopher must maintain, *that animals enjoy MIND.* The possession of mind, Dr. E. asserts, necessarily implies the presence of a brain for its exertion, and introduces a note quoted from Blumenbach's Comparative Anatomy, wherein it is stated by that celebrated physiologist, that those animals which inhabit corals, and the proper zoophytes, most genera of the orders of the Linnæan class of vermes, are found to possess a distinct nervous system, although, as he adds, "former anatomists have expressly declared, in several instances, that no such parts existed."

Dr. Elliotson gives a very striking instance of what might be called judgment, in a wasp, which would be so named if exhibited by a man. It is quoted from Dr. Darwin's Zoonomia.

"A wasp on a gravel walk had caught a fly nearly as large as itself. Kneeling on the ground, I observed him separate the tail and the head from the body part to

which the wings were attached. He then took the body part in his paws and rose about two feet from the ground with it; but a gentle breeze wafting the wings of the fly turned him round in the air and he settled again with his prey upon the gravel. I then distinctly observed him cut off with his mouth first one of the wings, and then the other, after which he flew away with it, unmolested by the wind."

The characteristics of mankind are well described. It is a subject admitting of an elevation of style, and Dr. E. does justice to it. His remarks on the erect posture we shall quote, as there is much useful information contained therein.

"The erect posture is natural and peculiar to man. All nations walk erect, and, among those individuals who have been discovered in a wild and solitary state, there is no well authenticated instance of one whose progression was on all fours. If we attempt this mode of progression, we move either on the knees or the points of the toes, throwing the legs obliquely back to a considerable distance; we find ourselves insecure and uneasy; our eyes instead of looking forwards are directed to the ground; and the openings of the nostrils are no longer at the lower part of the nose,—in a situation to receive ascending odorous particles, but lie behind it. Our inferior extremities, being of much greater length, in proportion to the others and to the trunk, than the posterior of brutes with four extremities, even in children in whom the proportion is less, are evidently not intended to coincide with them in movement; they are much stronger than the arms, obviously for the purpose of great support: the presence of calves, which are found in man alone, shows that the legs are to support and move the whole machine; the thigh bones are in the same line with the trunk, in quadrupeds they form an angle, frequently an acute one; the bones of the tarsus become hard and perfect sooner than those of the carpus, because strength of leg is required for standing and walking sooner than strength of arm and hand for labour; the great toe is of the highest importance to the erect posture, and bestowed exclusively on mankind; the os calcis is very large, particularly at its posterior projection, for the insertion of the strong muscles of the calf, and lies at right angles with the leg; we alone can rest fully upon it, and in fact upon the whole of the tarsus, metatarsus, and toes. The superior extremities do not lie under the trunk as they would if destined for its support, but on its sides, capable of motion in every direction towards objects; the forearm extends itself outwards, not forwards, as in quadrupeds, where it is an organ of progression; the hand is fixed not at right angles with the arm, as an instrument of support, but in the same line, and cannot be extended to a right angle without painfully stretching the flexor tendons; the superior extremity is calculated in the erect posture for seizing and handling objects, by the freedom of its motions, by the great length of the fingers above that of the toes, and by the existence of the thumb, which, standing at a distance from the fingers and bending towards them, acts as an opponent, while the great toe is, like the rest, too short for apprehension, stands in the same line with them, and moves in the same direction: were our hands employed in the horizontal posture, they would be lost to us as grand instruments in the exercise of our mental superiority. Quadrupeds have a strong ligament at the back of the neck to sustain the head; in us there is no such thing, and our extensor muscles at the back of the neck are comparatively very weak. They have the thorax deep and narrow, that the anterior extremities may lie near together and give more support; the sternum too is longer, and the ribs extend considerably towards the pelvis to maintain the incumbent viscera; our thorax is broad from side to side, that the arms being thrown to a distance may have greater extent of motion, and shallow from the sternum to the spine; and the abdominal viscera, pressing towards the pelvis rather than towards the surface of the abdomen in the erect attitude, do not here require an osseous support. The pelvis is beautifully adapted in us for supporting the bowels in the erect posture; it is extremely expanded, and the sacrum and os coccygis bend forwards below: in brutes it does not merit the name of pelvis; for, not having to support the abdominal contents, it is narrow, and the sacrum inclines but little to the pubes. The nates, besides extending the pelvis upon the thigh bones in the erect state of standing or walking, allow us to rest while awake in the sitting posture, in which, the head and trunk being still erect, our organs of sense have their proper direction equally as in walking or standing: were we compelled to lie down like quadrupeds, when resting during the waking state, the different organs of the face must change their present situation to retain their present utility, no less than if we were compelled to adopt the horizontal progression; and, conversely,

were their situation so changed, the provision for the sitting posture would be comparatively useless."

Dr. E. then considers the erroneousness of different opinions regarding the brain as indicative of the mind; first, that which taught that the brain of man was the largest of all brains: next that of Soemmering, that the brain, in respect to the nerves arising from it, is the largest; that of Camper's facial line; that of Daubenton's occipital angle. All these are quickly disposed of, and for an account of their disposal we must refer the reader to the work itself.

Dr. E. then treats of the varieties of mankind adopting the division of Blumenbach already noticed. The Caucasian is thought to be pre-eminent in all the mental and corporeal particulars which distinguish man from brutes. He afterwards inquires whether these varieties have originated from the influence of various causes upon the descendants of two or of more parents, or to original differences in more than two primary parents? The replies to these questions must be taken in full; and, therefore, we should do injustice to the essayist to make quotations. We are tempted, however, to introduce one.

"Analogical and direct facts lead to the conclusion that none of the differences among mankind are so great as to require the belief of their originality.

"Animated beings have a general tendency to produce offspring resembling themselves, in both mental and corporeal qualities.

'Fortes creantur fortibus et bonis;
Est in juvenis, est in equis patrum
Virtus: nec imbellum feroce
Progenerant aquilæ columbam.'

"An exception occasionally occurs, much more frequently, we are told, in the domestic than the wild state,—the offspring differs in some particular from the parents; and by the force of the general tendency transmits to its offspring its own peculiarity. By selecting such examples, a breed peculiar in colour, figure, the form of some one part, or in some mental quality, may be produced. Thus, by killing all the black individuals which appear among our sheep, and breeding from the white only, our flocks are white; while, by an opposite practice pursued in some countries, they are black: thus a ram accidentally produced on a farm in Connecticut, with elbow-shaped forelegs and a great shortness and weakness of joint indeed in all four extremities, was selected for propagation, and the *áγχλν* breed, unable to climb over fences, is now established: thus some breeds of hares have horns like the roebuck: the Dorking fowl has two hind claws; and fowls in short are bred in every conceivable variety. Individuals, distinguished from others by no greater differences than those which thus spring up accidentally, cannot be supposed to belong to a separate species. Upon the comparison of these differences depends the analogical argument first employed by Blumenbach. Finding the ferret (*mustela furo*) to differ from the pole-cat (*m. putorius*) by the redness of its eyes, he concludes it is merely a variety of the same species, because instances of this deviation are known to occur accidentally in other animals; but he concludes the African elephant is of a species distinct from the Asiatic, because the invariable difference of their molar teeth is of a description which naturalists have never found accidental. Now there exist among mankind no differences greater than what happen occasionally in separate species of brutes."

Taking the whole work, we are glad to see two such clever men helping one another: one throwing light upon the views of the other: both good, though their goodness consists in points considerably different. The one is short and general; the other is fonder of detail and more full. Both are mutually helpful; and we leave the work, which has afforded us so much pleasure, with the hope that it may be soon undergoing another edition.

XII.

A Practical Treatise on the Typhus or Adynamic Fever. By JOHN BURNE, M. D. &c. &c. Octavo, pp. 248.

PERHAPS there is no class of diseases which has attracted more attention, or given rise to a greater variety of sentiment and discussion than fevers. The frequency of their occurrence, the fatality of their character, and the obscurity in which they are involved, are inducements sufficient to elicit the most patient investigation. But, as in almost every other subject of difficulty, the progress made has not been in proportion to the amount of labour; and, whether we examine their etiology, pathology, or treatment, it is much to be feared that few of our modern writers are more orthodox in their views than the Sage of Cos. The constant bias that exists in our profession to study Nature through the medium of prejudice, to extract general inferences from premises that are particular, and to invest effects with the importance of causes, has cruelly retarded the march of its improvement. It is a science of itself to know how to distinguish facts from fancies, and to ascribe to phenomena, as they rise, the rank and value which Nature has assigned them. Because intestinal disease is a frequent result of fever, it has been inferred by many that fever is its consequence; and, because the brain and its appendages are often found vascular or inflamed, it has been hastily assumed, that the *sedes et causa morbi* are to be found in the brain, and in the brain only. Such exclusive doctrines are the product of partial and undigested views, and the practice they recommend is, consequently, confined to the relief of a few out of many symptoms.

We are, therefore, pleased to find that our present author has taken a more *systematic* view of this disease, and that, while Broussais and Clutterbuck insist upon its *organic* character, we have Burne to add to the number of those, who are not less successful in their practice, while they are more extended in their etiology.

But, while we hail Dr. Burne's escape from the schools of the localists, we fear he has received a lesson out of that of Brown; for, although he refuses to confine fever to a certain seat, he hesitates not to confine it to a certain character. After dividing fevers into such as are inflammatory and adynamic; and subdividing these into such as are purely inflammatory and purely adynamic, and those accompanied by local inflammation, he rejects the generic term *typhus*, to which we have been hitherto accustomed, and adopts the word *adynamic* as a more eligible title, within which he includes "the putrid or malignant fever of Sydenham; the slow nervous fever of Huxham; the nervous fever of common language; the synochus, typhus mitior and gravior, of Cullen; the jail and hospital fever; the *fièvres essentielles* of the French; the epidemic of the Irish writers; the contagious of

Bateman; the typhus of Dr. Armstrong; and the proper, idiopathic, or essential fever of Dr. Clutterbuck." P. 8.

Had Dr. Burne confined his epithet *adynamic* to the lowest and most atonic forms of fever, perhaps, the change, which he wishes to introduce into our nomenclature, would have been useful, and might have been adopted; but we cannot silently subscribe to an alteration, which is founded upon, and inculcates the old doctrine of debility; a doctrine, which, however ornamented by the ingenuity of Brown, and however countenanced by vulgar prejudices, has been productive of infinite mischief to men and to medicine. Holding, as we do, fever, in the abstract, without relation to peculiar epidemics, constitutions, and circumstances, to be more or less a tonic disease, where the whole system is under excitement, and where every texture and organ are stimulated to an inordinate degree, we cannot sanction an epithet which gives the reader, *in limine*, what we deem an erroneous view of its real nature. To designate by the same title the synochus and typhus gravior of Cullen, the putrid fever of Sydenham, and the brain fever of Clutterbuck, is, to say the least of it, indiscriminating and unsafe; not that we imagine they are different in essence, (with Dr. B. we believe them to be the same, "differing only in degree," as he rightly observes, "and modified by circumstances:") but, because the symptoms *are* different, and the treatment *ought* to be different. Our author admits that the debility, which exists in fever, is what Brown would have called *indirect*, and not "ordinary debility," p. 11; but the term *adynamic* (which, in truth, explains itself) signifies not *depression*, but *want* of power, or absolute debility; and, consequently, conveys a meaning very different from that which the writer's own admission required.

We have already stated that Dr. B. following the example of Pinel, divides all fevers into two great classes, viz. inflammatory and adynamic. These he subdivides into simple inflammatory and simple adynamic fever, and inflammatory and adynamic fever complicated with local inflammation: but, as his work is confined to the two varieties of adynamic fever, the observations which follow will, of course, be restricted to them.

"In order to the production (says the Dr.) of the adynamic fever, it is necessary that there be a certain state of system, which state depends, in most instances, on a continued exposure to a poisoned or contaminated atmosphere. This state then existing, it will be found that the adynamic fever attacks in two ways; and, it is of great importance, that these should be clearly understood, because they account for the presence or supervention of inflammation in some cases, and the absence of it in others, and thus afford evidence that certain modern theories are not founded on correct principles. In the one way, then, it attacks through the intervention of an accidental cause; in the other without such intervention. When the attack is without the intervention of an accidental cause, the condition of the body is, of itself, sufficient to stir up and give rise to all those actions and phenomena which constitute the adynamic fever. But, when the attack is with the intervention of an accidental cause, the condition of the body, though not sufficient of itself to produce the fever, is yet sufficient to give to the fever thus accidentally produced, the peculiar adynamic type. In the one case, the development is slow and progres-

sive, requiring many days or even weeks; in the other, it is fully formed in a few hours." P. 14.

He then details the symptoms of attack in both ways, merely differing from each other in the rapidity of their progress, and then remarks, "When it attacks without the intervention of an accidental cause, so far as I have seen, the attack is not accompanied with any organic inflammation;" it being only in such cases as occur through some accidental cause, as a severe cold, exposure to rain, wind, &c. "that organic inflammations are apt to accompany it from the beginning." 17, 18.

The accuracy of these observations we are somewhat disposed to question.* That the febrile poison often lies latent in the constitution for a long time before its existence is announced by appropriate symptoms, is a fact as well established as it is important; and, that the development of these symptoms, in different cases, occupies very different periods of time, is not to be disputed; and, moreover, that there are instances, in which the pathognomonic signs of this disease suddenly and unexpectedly supervene to a perfect state of health, is certain; but, that fever is never accompanied by inflammation, when it attacks without the intervention of an accidental cause, is a position to which we cannot assent. Had Dr. B. required us to believe that inflammation occurred *less frequently* in such cases, his requisition would have been more reasonable; for, it is unquestionable, that the more sudden the excitement is, the less time and power have the weaker organs to resist, or adapt themselves to an increase of action, and the fainter is their chance of escape. We believe there are few examples of what our author calls *simple adynamic fever*, or fever unaccompanied by any organic inflammation. We have inspected many bodies after death, and seldom have we failed in detecting the effects of phlogistic action; and if symptoms during life be minutely watched, we hesitate not to aver, that the experienced observer will generally be able to point out the organ, on which the circulation preys with predominating force. Organic inflammations are not the essentials but accidents of fever, the frequency of whose occurrence is more in proportion to the susceptibility of individual texture, than to the peculiar nature of the exciting cause; and, whether the attacks arise from exposure to cold, or exposure to contagion, the number and nature of the organs affected will mainly depend upon their state of health before the excitement has commenced. Very rarely, we fear, does it happen, that all the parts of our complicated system are equally healthy, and can equally resist the inroads of disease; and we are taught by the simplest law in mechanical

* We imagine that every cause of fever is *accidental*, and that, although some may operate more actively and suddenly than others, fever cannot arise without some *accidental* cause. Respiring a contaminated atmosphere is as much an *accident* as respiring a cold atmosphere; and we are not aware, that any one is exposed, by a *fatal necessity*, to be assailed by this or any other disease. The above division is, therefore, built upon a distinction without a difference.

philosophy, that the weakest portion of a structure, equally assailed, will be the first to strike to the assailing power.

"The adynamic fever, then, being produced in either of the two ways of attack just described, will be found to differ very much in severity, for which reason and for practical purposes it is expedient to divide it into degrees; and these may, with great propriety, be limited to four." 19. In the first occur slight head-ach, impaired appetite, tongue moist but white, except at the tip, which is red, flushed cheeks, suffused eyes, slight duskiness, and increased heat of skin, red and scanty urine, slow bowels, prostration of strength, and blunted senses. In the second degree the pulse is frequent, "*rather full and rather strong,*" the head-ach increases, the tongue is more coated, the skin is hot, (shivering or sense of cold, although one of the most frequent and familiar febrile symptoms, is never mentioned,) the bowels are more inactive, and, in short, the symptoms of the first degree are much aggravated. In the third grade, the strength is much prostrated, the patient is averse to the slightest exertion, the respiration labours, the muscles twitch and tremble, the senses are more torpid, the head-ach becomes more dull, and is often accompanied by a sense of weight or sound, the thirst is excessive, (this is the first time that the symptom is noticed,) the countenance is inexpressive, the flush upon the cheek is now more purple than red, the eyes are suffused, glassy, and vacant, half closed by a relaxation of the upper eye-lids, and besmeared with shreds of mucus, the lips are either blue, or with the teeth covered with black sordes, the breath is very offensive, (there is no notice taken of that peculiar odour which is exhaled from the surface of fever-patients, and than which nothing is more characteristic of this disease,) the tongue is thickly coated, brown and dry in the middle, red and dry at the top, and whitish and moist at the edges, the "*pulse seldom exceeds 90, it is fullish, and sometimes rather firm,*" the skin is dry and variable in temperature, the urine is turbid when cold, the abdomen is full and tender on heavy pressure, (this is the first notice of a symptom which, we imagine, will be much more frequently found in the two first than the last degrees of fever; for, it is a very important fact, that intestinal disease may go on to a destructive extent, when the sensibility is blunted by an oppressed cerebrum, without betraying even its existence under the very firmest pressure, and this is a circumstance which ought to be largely insisted on, and carefully remembered) the bowels are generally slow, but sometimes lax, and the stools are very offensive; there is much restlessness and delirium, but especially during night. The patient does not, in general, remain long in this state. If he recover, his symptoms either gradually decline, or more rapidly disappear upon the supervention of some critical discharge, as epistaxis, diarrhœa, or a profuse sweat; but, if he sink, his delirium becomes constant, he talks incoherently, or screams, or mutters; his jactitation is incessant, or his prostration so great,

that he lies prone and motionless, his lethargy increases, his skin becomes cold and purple, and, the vital function ceasing, the curtain drops. In the fourth and last degree, all the symptoms already specified, become very severe immediately the fever is formed, and run hastily on to a fatal termination; but, as there is nothing peculiar in them, it is unnecessary to follow the author's delineations any further. In a malady so interesting as fever, our investigations cannot be too minute, so long as they are instructive; but, we had rather Dr. B. had traced its symptoms through four different stages than four different degrees, in as far as all these degrees frequently occur during one and the same attack, equally requiring the same variety of treatment.

The second chapter is devoted to some peculiarities from the ordinary combinations of symptoms, for which the author furnishes us with a rationale, by referring to the character of the exciting cause; how, in one case, in which head symptoms had been the most severe, the patient had replaced upon his head a cap that had fallen into the water; and, in another, how the abdomen was principally involved, by the patient having been previously subjected to hard labour. But, why hard labour should not injure the lungs as much as the abdominal viscera, the author leaves us to explain. The truth is, that he might have furnished many such instances of febrile *partialities*, which admit of no elucidation by a reference to the exciting causes, and are only to be accounted for on the principle already stated. The following remarks upon Dr. Armstrong's variety of congestive fever we leave to the consideration of our readers:—

“There is a congestive state also, which, now and then, happens at the beginning, or during the course of the adynamic fever. In this state, there is great and often dangerous depression of the vital powers; so that, instead of hot skin and accelerated pulse, the temperature of the surface is below the natural standard, and the pulse slow and feeble. The skin of the whole body is very dusky, and the hands, feet, and lips of a leaden hue; all, evidently, arising from a congestion of the venous system, the result of feeble and slow circulation; now to this state has been given the term congestive fever, but this is a nosological solecism, for that condition cannot be called fever, in which the signs of fever do not exist; and there is here neither heat of skin nor accelerated pulse, both which are necessary to constitute fever. The appellation is not consistent with the condition specified, and, therefore, is not correct.” p. 37.

That the pulse is, in general, the safest index of the activity of the heart, and that the use of the lancet in disease ought generally to be indicated by the energy of this organ, are points in therapeutics which few can question; but, that there may be instances, even in adynamic fever, in which other symptoms than the pulse form more useful, because more practical guides, is an important fact, of which our author seems not to be sufficiently aware. After very considerable depletion, without relief, when the pulse had become *apparently* weak and incompressible, we have seen a few more ounces entirely remove the disagreeable symptoms, and the patient get rapidly well; and, in several instances, we have found, that taking away six or ten ozs. has changed the character of the pulse from that of *masked* debility to strength, requiring further depletion to control it.

Our experience, therefore, in such cases, prevents us from adopting any universal rule; and, when we find our author asserting, that in fever, "the pulse is never full and strong, and is not firm," (p. 54.) we are still less inclined to receive, without some qualification, his remarks upon a point of so much importance. We are not advocates for bleeding largely in the last stages of fever, nor do we wish to advocate the practice of treating fever, in the first stage, as a *purely* inflammatory disease; but, we maintain that copious and repeated depletions are often safe and even necessary, and, that, while the pulse is sometimes restrained, and simulates weakness through want of bleeding, rising in force and frequency under the use of the lancet, it will frequently be found *full, strong, and firm, not retreating from the finger, nor leaving upon it a slight and transient impression*. Our author will, perhaps, permit us to observe, *en passant*, that his theory of the state of the circulation during fever is built upon several physiological points, which themselves require a foundation. The tonicity of arteries, their power of contracting upon their contents, the assistance given to the venous circulation by muscular contraction, and the necessity of a large column of blood in the arteries to preserve them from collapsing, are positions which have not been proved, and are no more than probable.

In fever, throughout all its degrees and stages, the tongue is an object of much importance, and merits the most particular and constant attention. If carefully watched, it will often indicate, with accuracy, the mucous condition of the stomach and intestines. With this view, the following remarks are very valuable.

"These different states of the tongue correspond with the different states of the alimentary canal. When the tongue is moist, the coating of a light shade and not thick, and the redness of the edges and point not deep, the belly is in a natural state, and so it remains when this tongue becomes clean and of a natural appearance. Where the tongue is dry or parched, the coating dark or black, and the edges and point of a deep red, the belly is flatulent or tympanitic, and tender, in a corresponding degree: the bowels are relaxed, and the dejections dark or black, and highly offensive, constituting the "dark or black offensive diarrhœa" to be spoken of hereafter. When the tongue has cleaned, and is left smooth, moist, of a raw red, and tender, sensible and sore, this state is accompanied with subsidence of the tympanitic belly and with relaxed bowels; but the dejections are now ochre-coloured, and much less offensive, constituting the "ochre-coloured diarrhœa" to be spoken of hereafter. In those instances where, at the decline of the fever, the tongue is left preternaturally clean, but instead of being moist, is dry and shining in the middle and at the point, as if polished, the belly remains tympanitic, more or less; and although the diarrhœa is ochre-coloured, the dejections continue highly offensive, which will be explained when the "ochre-coloured diarrhœa" is considered. When the adynamic fever is combined with rheumatism, the character of the tongue is modified, and the foul surface is made up of a mixture of the dirty coating, peculiar to the adynamic fever, and the white fur peculiar to rheumatism; and, when it becomes clean, the surface will be whiter, and the substance paler, than when rheumatism has not existed." p. 61.

It frequently happens in those cases of fever, which have arisen from, or have been accompanied by neglected bowels, that the abdomen is more or less tympanitic, and betrays considerable tenderness under firm pressure. In such instances, there can be no doubt, that this accumulation of gas is often the product of retained fæces, and will generally disappear with their re-

moval ; but, that this tympanitic condition does not *always* arise from constipation is certain, since we daily see febrile patients, after a tardy course of illness, with distended bellies, yet, whose primæ viæ have been carefully cleared out at the commencement of the disease, and preserved regular throughout it by mild aperients. Indeed, the most marked and obstinate cases of tympanitis, which we have witnessed, occurred during convalescence, and probably, depended upon the debilitated state of the alimentary canal, from a continued course of purging.

Dr. B. in his symptomatology, enumerates diarrhœa, which he distinguishes into two kinds, "the black offensive diarrhœa," and "the ochre-coloured diarrhœa;" the former accompanying the most aggravated periods, and the latter the wane of the disease. But, we much question whether the regularity of this phenomenon entitles it to rank among the common symptoms of fever, and also, whether, when it does appear, its character sanctions such a distinction. Except in the enteritic forms of typhus, where the mucous lining of the bowels is the principal domicile of diseased action, and when its irritability is easily excited by the gentlest stimuli, constipation, we apprehend, is a more regular attendant than diarrhœa. If the brain or lungs be chiefly affected, the bowels are generally confined and dull, and seldom, in such cases, do they act without the aid of medicine, unless Nature has chosen them as the outlet, through which, by a critical discharge, she intends expelling the disease. Besides, the external character of the dejections vary daily with the symptoms and progress of the disease ; sometimes assuming a more natural, at others a more diseased aspect. During the first stage, while we are unloading the intestines of their accumulated contents, the stools are, in general, both dark and offensive: but, so soon as the discharge has been removed, they put on many varieties of appearance, according to the medicines given, to the inveteracy or mildness of the existing symptoms. Dr. Bright believes that ochre-coloured dejections indicate, either the presence, or approach of ulceration of the bowels; and, although this remark may be disputed as a general observation, we believe experience will warrant the assertion, that, when the intestines are nearly empty, as they are throughout the greater part of fever, treated as it now is with so much opening medicine, and the mucous membrane is excited to an increased secretion, the dejections will be found either yellow, or of a light colour.

The following observations, upon the connexion between ventricular effusion and retention of urine, are, we fear, more ingenious than just.

"There would be little difficulty or attendant danger, was the patient able to direct the attention of the physician to his local distress ; but, this he is rendered incapable of, by his general insensibility and confused perceptions. The distention of the bladder, therefore goes on, and with it, distention of the ureters, infundibula, and pelves of the kidneys. The great pressure of this distention *resists* the distillation of the urine from the mammary processes and uriniferous tubules: the secretion itself is also thereby diminished : and then *supervene* the phenomena and effects of suppression of urine ;

namely, effusion into the ventricles with its concomitant signs. The secretion of the urine being only diminished, not altogether suppressed, the bladder would inevitably burst, was it not that the pressure eventually overcomes the resistance of the sphincter, and the urine drips away, forming also incontinence. Yet, notwithstanding this overflowing, the bladder is only secured from bursting, for the great distention and pressure continue, and oppose the secretion of urine, and thereby encourage and augment the ventricular effusion." p. 72.

We believe we may safely assert that the prevailing opinion is the very opposite of that contained in this extract. That deficiency of secretion, or retention of urine may *augment* effusion within the head, it would be unphysiological to deny; but, that this effusion is the *sole result* of such non-secretion or retention, it is not easy to credit; and it would be more difficult to prove. In every instance, where the urinary apparatus fails to discharge its accustomed duties, the energy and functions of the brain will be found to have been *previously* affected. The mind is either muddled and delirious, or torpid and insensible; the external senses are either blunted and dull, or cease entirely to acknowledge their appropriate stimuli; deglutition is impaired or gone; the sphincter of the rectum has lost its retentive power; the patient lies powerless and prostrate, with his head down off the pillow, and his feet drawn up in the bed, and his entire system is under the paralyzing influence of an oppressed, or exhausted sensorium. We do not remember an instance of retention, suppression, or incontinence of urine during fever, in which the cerebral functions were undisturbed; and we are ignorant of any case, in which either a deficiency, retention, or incontinence of urine *preceded* their disturbance. Derangement of the urinary organ is, therefore, *posterior to, and the effect of* derangement of the brain; and this rationale of the symptom is confirmed by dissection, when it frequently occurs, that water is found *in large quantities* upon the brain and within the ventricles, while *none lies within the bladder*, and, yet, in such cases no accumulation of urine has been permitted during life, and no difficulty has been experienced in passing it. The reverse of this is likewise no unusual occurrence; the bladder being found *full of urine, and no effusion within the head*. Moreover admitting the fact, we would ask our author why the cavities of the brain are those *always* chosen by Nature, into which she may pour the retained fluid? Why do we not have other forms of dropsy, as hydrothorax, ascites, or anasarca? In ordinary cases of retained urine, from stricture or diseased prostrate, we find no such partiality; on the contrary we believe that ventricular effusion is a comparatively rare occurrence.

We have no experience of the state portrayed by the following sentence.

"Sometimes, as the adynamic fever is on the decline, there takes place watching, with a peculiar, staring, rather brilliant, and observant eye, and frequent lifting up of the head, as it were to listen, and mild delirium. The pulse is frequent, generally 120 in the minute; its stroke is rather open and vibrating, but is short, and leaves no impression on the finger; and the artery is very compressible. These signs must not be mistaken for irritation, or sub-acute inflammation of the brain: they occur in patients who have lost much blood; they are the result of that loss, and depend immediately on a defective arterial impulse, and defective supply of blood to the brain." p. 84.

Speaking of the causes which retard convalescence from fever or occasion a relapse, he furnishes us with these important observations :

"The re-establishment of the health of patients, after the adynamic fever has terminated, is, perhaps, more rapid and complete, under favourable circumstances, than after any other disease whatsoever. I have known a convalescent gain flesh after the rate of two pounds in three days, for three weeks successively. Under less favourable circumstances, the period of convalescence is uncertain. At one time it may be early, at another protracted, and is influenced by many causes, such as any unsound condition in which the body may be left, the quantity and quality of the food, the purity or impurity of the air from locality, or the ventilation of the room or ward in which is the convalescent. Whenever an organ has suffered much during the course of an adynamic fever, convalescence is very apt to be protracted, that organ requiring time to resume its healthy functions, or to adapt itself to the new circumstances which may arise out of its diseased condition. Thus, the functions of the brain may remain disturbed for weeks, or those of the lungs be imperfectly performed. Diet, also, influences the period of convalescence; for the weak and susceptible state of the stomach and bowels, together with an eager appetite, render it exceedingly difficult to arrive at health without frequent checks; every little indulgence or excess being immediately followed by general disorder. The continuing to breathe the impure air of a bad locality, or of a close room, or ill ventilated ward (surely these are all localities, and require not specification, after being preceded by a term so general) retards convalescence; and, from this cause, one sometimes sees patients quite at a stand-still, (we know of no variety of standing from that of *standing-still*; standing excludes motion) for many days; convalescents are extremely susceptible of cold, and consequent organic inflammation. I knew a young woman, who lost her life from rheumatic inflammation of the lining membrane of the heart, brought on by exposure to currents of air, and to a damp atmosphere; convalescents are always importunate to be allowed to sit up; but their request must not be readily acceded to." p. 90.

The diagnosis of fever is easy to an experienced observer, but to those who have witnessed only a few cases, it is occasionally attended with considerable difficulty.

"There are only two affections," says our author, "with which the adynamic fever is likely to be confounded, namely, delirium tremens, and a febrile state which accompanies the latter stages of some diseases of the urinary organs, and there is so much similarity in the disordered condition of the nervous system in all these diseases, that I think it would not be difficult to show that they are only modifications of the same thing, produced by different causes. They may, nevertheless, be easily distinguished. Delirium tremens is known by the peculiar and excessive tremor of the muscles, from which its name, is, in part, derived; by the very short and breathless respiration, caused by the tremor affecting the diaphragm; and, also, by the vacant, unsteady, and staring roll of the eye; by the constant and extreme agitation, and by the history of the patient's habits. The febrile state, which accompanies affections of the urinary organs, is at once distinguished by the presence of the local disease." p. 102.

There is a circumstance of some importance, however, which is overlooked by Dr. B. in his observations on diagnosis. The physician is not always called in at the commencement of the disease, and often cannot procure such information respecting its incipient symptoms as can be depended on; and, therefore, it is not a rare occurrence that, mistaking the effect for the cause, he pronounces his patient to be labouring under fever, while he is only labouring under the effects of some primary organic inflammation. In the last stages of pneumonia and bronchitis, we have seen symptoms de-

veloped, as similar to those of idiopathic fever as it was possible to conceive; and, believing, as we do, that organic inflammation is a much more frequent attendant upon, and consequence of fever than Dr. B. imagines, it is sometimes a task of difficulty to rank cause and effect in their natural relative position, in the absence of a satisfactory history of the case.

In treating of the pathology of fever, Dr. B. divides the morbid changes observable after death, into such as are proper, and such as are accidental, limiting his first class to those of the brain and fecal tube; and then gives directions by which we ought to be guided in conducting our post-mortem researches. They are so correct and important that we will not mutilate them by an extract.

"In all dissections, in which it is desirable to ascertain the exact condition of the vascular system of the brain, the examination should commence with the head; for, if the chest is inspected first, and, as is generally the case, the superior cava or the subclavian veins are divided, the gorged veins and sinuses of the brain will empty themselves through the jugulars into the chest, and so modify very much the appearance. Hence, it is common, under these circumstances, to find the larger veins of the pia mater empty and flaccid, while the smaller are gorged. This emptying of the veins of the pia mater, and of the sinuses, is very much brought about by the great pressure the brain sustains from the force employed to tear off the cranium; a force often sufficient to diminish the conjugate diameter of the brain one inch during the separation of the dura mater. The pressure from this forcible separation acts, in a degree, on the principle of an exhausting pump: it forces the blood out of the veins and sinuses; and when the skull-cap is removed, and the pressure acts no longer, air will not unfrequently find its way through the divided vessels in the chest into the larger veins of the pia mater (?) to supply the place of the blood which has been forced out of them. On the same principle, air will sometimes get into one of the larger veins of the pia mater through a wound in the dura mater, the chest not having been opened." (This is, we think, the true rationale of the appearance of air in the vessels of the head in all cases.) "So great an influence has the division of the veins in the chest, in allowing the escape of blood from the venous system of the brain, that I have seen all the blood disgorged from the posterior part of the plexus choroides, leaving its vessel flaccid and empty, while the anterior part remained excessively gorged; the evacuation of the posterior part of the plexus being favoured by gravitation, the body lying on its back, while gravitation opposed the disgorging of the anterior part of the plexus choroides, on account of its peculiar situation and inclination. The morbid appearances depend much on the period at which the dissection is made, and on the cause from which the patient (proximately, we presume, is meant) died; dissection, therefore, should be performed as soon after death as practicable. The bodies of adynamic fever patients seldom grow so stiff after death, as the bodies of those who have died from other diseases. The excessive prostration of the muscular powers peculiar to this fever, prevents the last act of life, the contraction of all the muscles, taking place to the same degree as in other cases." p. 113.

In the head the most ordinary appearances are a sero-gelatinous effusion between the arachnoid and pia mater, opacity and thickening of the arachnoid membrane, (the opacity Dr. B. considers as partly the effect of inflammation, and partly the result of maceration in the fluid lying between it and the pia; but it can only be in such bodies as have been inspected long after death, that we can ascribe much to this latter cause) turgidity of the larger veins and sinuses, except when the serosity is copious,—

—vascularity of the brain, displayed by making transverse incisions through its substance, when numerous bleeding puncta will appear,—turgescence of the plexus choroides, (this vascular tissue is very seldom highly injected, and never when there is much water within the ventricle) and a variable increase of serum in the ventricles. In some cases the arachnoid is rendered thick by an adventitious deposit, and the fluid beneath it is semi-opake; but he has never seen fibrine effused between the membranes, and although the brain is generally firmer than natural, when the arachnoid is thickened, in common cases it is of the ordinary consistence.

"When a patient dies from the urgency of the adynamic fever itself, there will be invariably found a greater or less effusion under the arachnoid, with a corresponding one in the ventricles, never exceeding about three drachms. When, therefore, a much larger quantity is discovered in the ventricles, it may be concluded, that it arises from some other cause than the fever, even though there be effusion under the arachnoid: and, if there is this greater effusion in the ventricles without any effusion under the arachnoid, and an effusion under the arachnoid is invariably found in cases fatal from the urgency of the fever, it follows, that death, as also the ventricular effusion, has been produced by some other cause than the fever, which cause may justly be concluded to be a retention or suppression of urine; seeing that, in every case of copious ventricular effusion, death has been preceded by one or other of these affections of the urinary organs."
p. 121.

The sentiments contained in this passage we dissent from *in toto*, and we caution the inexperienced from adopting them without very mature deliberation. In many cases of the *purest adynamic fever* (and the observations now advanced are the result of multiplied experience) we have found water under the arachnoid *without any effusion* into the ventricles, and, when effusion co-existed with the sub-arachnoid deposit, we have found the quantity to vary from 3ss. to 3iv. or more; and, that this plus-quantity of ventricular fluid could not have been the product of suppressed or retained urine is rendered indisputable by the fact, that, in many such instances, there was no derangement of the urinary organs. It is incorrect, therefore to assert, in terms so unqualified, that, whenever the case proves fatal, through the malignancy of the fever itself, both ventricular and sub-arachnoid effusion will be found, and that the amount of the former will never exceed 3iij. Besides, admitting that this increased quantity of serum arose from a diminished quantity of urine, will any one be disposed to believe with Dr. B. that death, as well as this ventricular effusion, has been produced by either a retention or suppression of urine? This is certainly "riding a hobby too far." We are not among the number of those, who can find the cause of death in any case of fever, an effusion within the head. Such a phenomenon only ranks with us as one termination of a preceding action, to which we ascribe much more importance; and we hold it to be a confounding of causes with effect, and our error not confined to our pathology, but extending to our therapeutics, to maintain, that a non-secretion or retention of urine, arising from a palsied condition of the kidneys or bladder, which condition itself arises from a prior derangement of the brain, can, in any case of fever, be the cause of dissolution. Were Dr. B.'s

views correct, very few, indeed, are destroyed immediately by fever. The profession have hitherto nearly overlooked a point involving the most important consequences, and the value of the catheter has not been sufficiently appreciated in its treatment.

Passing over our author's morbid anatomy of the abdomen, which we will refer to in our review of the next article,* we are informed that the bronchial lining is, in general, preternaturally vascular, and has often adhering to it much inspissated mucus, which the patient has not had strength to expectorate. This mucus is sometimes mixed with blood, and sometimes with pus, when the mucous membrane is found thickened and soft as well as vascular (and may be easily abraded by the nail),—the lungs are, in general, too heavy, and do not completely collapse, their natural structure is not, however, necessarily altered, their inferior and most depending portions are gorged with blood, and are either of a livid or purple colour ;—sometimes large portions of them are hepatized and irrespirable, at others, circumscribed livid patches, resembling the spleen in structure, will be discovered in the middle of their substance, and which are considered to have been formed by the effusion of blood before death. The heart is often relaxed and soft, and, in one case, where the symptoms resembled those of delirium tremens, it was found pale, flabby, and easily torn. The inner surface of the aorta will, on some occasions, be seen " of a dark scarlet colour, which may be attributed to staining from the presence of blood in the vessel." The same appearance we have often met in the interior of the heart, especially in its valves and the mouths of the large vessels. p. 139.

Before leaving this department of the subject we wish to observe, that Dr. B. constructs his rationale of the morbid anatomy of fever upon one and the same principle, " debility." If effusion exist within the head it is in consequence of impaired nervous energy ; or, if the brain be turgid with blood, it is because its vessels are labouring under a congestion, from deficiency of power to carry forward their contents. If the intestines be found tympanitic, and their mucous tissue inflamed or ulcerated, it is because their muscular powers being prostrated, and their peristaltic action weaker in effect, that their accumulating and putrefying contents extricate thin gases and irritate the canal to inflammation and disease, or, if the chest betray effects of disorder, whether they be injection or thickening of the bronchial lining, engorgement or consolidation of the lungs, they result, either from inability to expectorate the ordinary secretion, which becomes viscid when retained and irritates the mucous membrane to inflammatory action, or from a dissolved condition of the blood, which, assisted by gravitation and enfeebled respiration, loads the parenchyma of the lungs to a degree incompatible with life.

* Review of Dr. Bright's work, which we have been obliged to defer till the next Number.—Ed.

This principle (debility) is, therefore, one of great use and applicability with our author; but, while such illustrations of symptoms and disease establish his consistency in adopting the epithet *adynamic*, we question very much, whether their simplicity is a sufficient test of their correctness, or their consistency with the title a satisfactory guarantee of their fidelity to nature. We are strongly inclined to suspect, that effects are sometimes mistaken for causes, and it were as difficult to convince us, that it is viscid mucus which inflames the bronchia, and putrid fæces which ulcerate the intestines, as it were to persuade us that it was the pus expectorated which generated tubercles, or that mucus stools were the cause of diarrhœa.

In another part he observes, that—

“The atonic character of inflammation accompanying the *adynamic* fever is, moreover, shown in the products of that inflammation, all of which are nearly destitute of fibrine, the characteristic of tonic or *healthy inflammation*. Where the serous membranes are the seat of inflammation, the effusion, instead of being fibrine, is sero-purulent, with merely shreds or flakes of albumen floating in it; so that there are either no adhesions between these membranes, or the adhesions are partial and slight. Where the mucous membranes are the seat, the product is merely mucus, and seldom or never mucus combined with pus. Where the inflammation is in the parenchyma of any organ, as of the lungs, constituting pneumonia typhodes, the consolidation is in a degree trifling compared with ordinary cases of pneumonic inflammation.” p. 42.

Now we can safely assert, that we have seen as active signs of inflammation during life, and as varied results of inflammation after death, in cases of fever, as in any individuals of the order phlegmasiæ. We have seen the pleuræ adhering, nay incorporated as it were; the parenchyma of the lungs fleshy, firm, and irrespirable; the surface of the heart studded with white specks of coagulated lymph; flakes of fibrine floating both in the pleural cavities, and that of the pericardium; the intestines agglutinated so firmly that they were torn by effecting a separation, and several other of the abdominal viscera, as the liver to the diaphragm, the omentum to the spleen, and the fundus of the bladder to the ileum, united by adventitious attachment. Then as to inflammation of the mucous membrane, we have witnessed cases, during which many pints of nearly unmixed pus were expectorated. One we may specify. A woman, of middle age, was seized with the ordinary symptoms of continued fever; but the cavity mainly affected was the chest. She first had a teasing cough, accompanied with mucous sputa; her breathing was hurried, her cheeks gradually became dusky, and then of a leaden hue in the centre; and her dyspnœa increased, and she began to expectorate large quantities of almost pure pus. The purulent expectoration became, at last, so copious, that confirmed consumption was apprehended, and it was only the stethoscope which rectified our diagnosis. She died, and upon dissection ulceration of the bowels, inflammation, thickening and softening of the mucous membrane of the air tubes, without any change of parenchymatous structure, were discovered.

After controverting in a very ingenious and able manner, the doctrines of Clutterbuck and Broussais, and arguing for the general or systematic nature of fever, the following propositions are laid down :—

“ That the adynamic fever has no local seat : that its nature is a morbid condition of the blood, produced by the operation of the primary cause, the respiration of a contaminated or poisoned atmosphere : that the morbid blood, acting on the brain and nervous system, is, of itself, sufficient in very many instances, to bring about the very great derangement and imperfect performance of all the functions of the organic and of the animal life ; which great derangement and imperfect performance of all the functions constitute the phenomena of the adynamic fever.” p. 161.

The first proposition we deem incontrovertable by those who have had an extensive experience of fever, and whose minds have neither been warped by theory, nor forestalled by prejudice: The opinions of Broussais, although followed almost exclusively in France, are quite heterodox and untenable ; and, although those of Clutterbuck are more plausible in theory, and more countenanced in practice, they are neither established by symptoms, nor can they explain appearances. But while we concur with our author in rejecting the doctrines of the Localists, as unnatural in not accounting for appearances, as illogical in ranking effects into causes, and as unpractical in fixing the eye of the practitioner upon one symptom and one organ, while it ought to comprehend within its glance every symptom and every organ ; we have not yet determined on adopting his view of the disease, though recommended by its antiquity and the probabilities attending it. In reviving the humoral pathology of fever, Dr. B. out to have called in the aid of chemistry, as the surest, if not the only means of establishing his doctrine. For, although every symptom and phenomenon receive a satisfactory explanation, by supposing the blood to be diseased, without a confirmation of this supposition, by an analysis of that fluid at the onset and during the progress of fever, such a view could only be regarded as an hypothesis. Had it been proved, that the blood of a fever-patient differs, in its internal constitution and external character, from that of a healthy person,—that this difference is discoverable prior to any other palpable febrile symptom,—that the symptoms proceed in intensity, “ *pari passu*,” with this alteration, and that the fever disappears with the disappearance of this difference,—Dr. B. would have had a strong claim upon the faith of his readers, a claim not to be resisted ; but, when no such, and, indeed, no analysis is furnished, when the only observation, made upon the chemistry of febrile blood in the entire volume, disagrees with the results of those who have examined it,* and when we believe, that all the phenomena of fever might be otherwise accounted for, we must for the present, at least, withhold our assent. That the external character of the blood, during the *advanced stages* of this disease, are changed, there is no doubt ; and, that a diseased state of

* See page 142 of this work, and Dr. Clanny's Lectures on Fever.

this fluid might and would produce *symptoms of fever*, we feel no scruple in believing: but, that fever is *in all cases* produced by such an alteration, and that such an alteration exists *before* every other febrile phenomenon, we have several reasons for doubting. At the commencement of the excitement, when the lancet is generally employed, the blood drawn does not differ very materially from that taken out of a healthy system, or one affected by organic inflammation. It separates freely into its constituent parts, and presents frequently, we might say generally, an inflamed surface; but, it is principally as the fever advances, as the whole body becomes more relaxed and disposed to putridity, and as the energies of the nervous system sink, that this fluid assumes a loose, dissolved, and peculiar aspect.

But, having already devoted much space to this review, we must *at present*, abstain from dilating on a subject involved in so much darkness, and which yet requires the most patient and minute investigation, and follow our author to what is equally interesting and not less useful, the treatment of the adynamic fever.

"The treatment of the adynamic fever resolves itself into four principal objects: namely, to arrest the progress of its development; to cure the disease when fully established; to subdue any organic inflammation which may accompany it; to conduct the patient from convalescence to health.

"And, the means by which these objects are to be accomplished, are emetics, aperients, bark, cold affusion, ventilation, febrifuges, blood-letting, mercury, hyosciamus and opium, stimulants and regimen." p. 166.

"Emetics," he observes, "are *never required*, except when the attack was without the intervention of an accidental cause." p. 166. Now, we really see no good reason for such an exclusive dictum respecting this class of medicines; and, were we friendly to such sweeping generalities, we would have no hesitation in preferring one which conveyed a sentiment the reverse of that contained in this extract. When the fever creeps slowly over the constitution, and gradually takes possession of every organ and function, we believe that neither emetics nor blood-letting will make much, if any impression upon the progress, or character of the disease. In such cases mischief has been imperceptibly accumulating, the functions of life are slowly but surely undermined, indifference gives way to languor, languor to prostration, and prostration to pain. The poison is insinuated, unfelt and by degrees, into the fountain of life; and it is not until its stream be thickly charged, that the unwary patient perceives his preceding disorder was only the commencement of disease. The enemy has gained too firm a grasp of his victim to be surprised and vanquished by a single stroke, and, although an emetic may be occasionally necessary, it will be seldom found to ameliorate the symptoms, or abridge the attack. Not so, however, in cases arising from cold, disordered stomach and bowels, or other accidental causes. The boundaries between health and sickness are here well defined, the moment when the poison began to operate is easily as-

certained, and the patient is not surprised into fever by the stealthy mode in which he has been involved. Under such circumstances, if an emetic be early employed, it will often arrest the progress of disease, or impart to it a mild and gentle type. We cannot, therefore, sanction the following passage,—when the fever attacks through the intervention of an exciting cause.

“The development is so sudden, as not to allow the practitioner an opportunity of attempting to arrest it. The development of the fever, therefore, from an accidental cause, cannot be prevented. But, it is far otherwise, when the way of attack is spontaneous, and the development slow and progressive; and if the aid of the practitioner is sought during this period, it will, in very many instances, stifle the fever in its birth, and save the patient from a long and serious illness.”

A certain time is necessary to habituate the system to a morbid change, and if any thing be done before the formation of this habit, which will impart a sudden and forcible shock, the tendency to disease is frequently destroyed, the chain of morbid action broken, and a new and healthy impulse given to the powers of life. Now, an emetic, or blood-letting, well-timed, acts as alteratives, we believe, in some such way; and, having seen many cases prevented and others shortened by such treatment, we consider it necessary to hold forth our veto against a sentiment, in itself, too exclusive, and which, when practically acted on, is calculated to deceive.

Speaking of aperients, he observes, that—

“The best are rhubarb, castor oil, and senna combined with manna. The dose always to be moderate; that of rhubarb varying from five to fifteen grains; of castor oil, from one drachm to half an ounce; of infusion of senna, from one drachm to an ounce, with a proportionate quantity of manna. The larger of these doses are (is) to be prescribed only at the commencement of the disease; and, as a general rule, the longer the disease has existed, the less is the dose required. Although these aperients are all eligible, I have found rhubarb the most so; and so effectually does it answer the purpose, in all states and stages of the disease, that I do not hesitate to recommend its use, to the almost entire exclusion of the castor oil and of the senna.” p. 167.

The following passage, we acknowledge, startled us:—

“Bark is as serviceable in arresting the formation of the adynamic fever, as it is in arresting the progress of an ague; and it may be most advantageously employed when the disease has been for some time on the decline, and distinct remissions occur: and, also, during the early stages of convalescence, particularly in hospital patients, who have always to contend, more or less, with an impure air.” p. 170.

We have already quoted a passage which informs us, that the development of fever from an accidental cause cannot be prevented by any mode of treatment; and, in this extract, we are taught that bark is as effectual in preventing the formation of an adynamic, as it is in curing an intermittent fever; consequently, admitting that one-third of all our cases of continued fever arise from accidental causes, (we use the word *accidental*, of course, in the author's own meaning,) the bark must be supposed to fail in curing one-third of all the cases of ague in which it is tried. Whereas the fact is, that, with some obstinate exceptions, the sulphate of quinine will arrest the progress of ague, as certainly as mercury will arrest the progress of syphilis.

This conclusion, however, although drawn from his own premises, we do not imagine he will defend, and, therefore, upon it we will insist no further; but, if bark can cure continued fever as infallibly as intermittent, why is the mortality of typhus so sadly disproportioned to that of ague? There is some obscurity in the structure of this passage, and, therefore, we may be misinterpreting the author. We cannot see how a disease can be *arrested before it is formed*; its *formation* may be *prevented*, and its *progress arrested*; yet supposing the Dr. intended to convey this meaning, how can he add in the next clause that the bark "may be most advantageously employed when the disease has been for some time on the decline?" Surely, if the formation of the disease can be prevented, or even its progress arrested by bark, it would be most advantageously employed at its commencement; and not at its decline. If we can cut short, or prevent typhus, by the use of this medicine, as certainly as we can cut short or prevent a fit of ague, why allow it to pursue its wonted course? why expose the patient to the pains and hazards of a protracted illness? and why administer at the close, in preference to the outset of the fever, a drug endowed with such therapeutic power? This is, at least, to trifle with sickness and to toy with death.

We attach no such value to bark in the treatment of *continued* fever. It is only when remissions are observable, that it can be employed with any propriety or prospect of success in the *early* stages; if exhibited during the period of excitement, when the skin is hot, the face flushed, the head disordered, the heart labouring, and all the functions disturbed, it will certainly do harm. But, if used in the decline or during convalescence, when the "heat of the battle" is over, and Nature, exhausted by the struggle, only requires strength to "gain the day," we then agree with our author in strongly recommending it, as, perhaps, the most effectual restorative we can have recourse to.

The undeserved neglect which cold-affusion has lately suffered, renders the following judicious remarks peculiarly valuable.

"At any period during the course of the adynamic fever, and in all cases which are not accompanied with local inflammation, cold affusion may be advantageously employed, whenever there is a burning heat of the whole surface of the body; and, particularly, where the skin is very dry, harsh, and contracted, and the prostration of strength great. It diminishes the heat of the surface, saves the strength, disposes the skin to perspiration, and the patient to sleep. I have known delirium cease for several hours after the use of the cold affusion. When the preternatural temperature of the skin is only partial, affusion would be prejudicial; but ablution would be grateful and serviceable; and the hot surface may be sponged with vinegar and water frequently in the course of the day." 173.

We are sorry, after such sentiments, to find that cold lotions to the head are disapproved of.

"The utility of evaporating lotions is, indeed, very questionable, either in these or in more violent cases. I have never seen any decided benefit from them; and they often give cold, and excite a languid inflammation of the eyes, with puriform discharge; and excite or increase pulmonary catarrh." 209.

Perhaps, in one case out of a hundred, the consequences here stated may be produced by such applications, but we have not had experience of

them even to that amount; and we are inclined to believe, that when they do occur, they are not to be attributed to the use, but to the abuse of the remedy. If cold be applied *only* when the temperature of the head is *above* that of the rest of the body, (and it is in such cases only that it will do good,) we are convinced that it will seldom or ever cause any disagreeable result. Evaporation will abstract the excess of heat and not sink the natural temperature, unless too long applied; but, if used when the scalp is not warmer than the rest of the surface, the evaporation will, probably, do more essential mischief by lowering the energy of the brain, than occasion such local inflammation. The consequences, then, are to be ascribed not to the application, but to the practitioner. Exposing the head to a cold atmosphere, after shaving the scalp, will often remove severe head-ach; and increasing the cold by the application of evaporating lotions, or an ice-cap, will frequently remove symptoms the most dangerous and distressing, without the aid of other treatment.

His views of ventilation are equally just and important.

"I have seen, over and over again, patients begin to improve, without the aid of medicine, the moment they have escaped the foul atmosphere of their own dwellings. And this is not to be wondered at, on the belief that the adynamic fever results from a certain condition of the blood, produced by the continued breathing a contaminated or poisoned atmosphere; for then the legitimate inference is, that the unhealthy condition being no longer kept up, but on the contrary, diminished by the substitution of a pure for an impure air, the effects of that unhealthy condition diminish also, and thus the adynamic signs subside. The impracticability of good ventilation is the reason why it is difficult to cure the poor at their own home; where a whole family, perhaps, is cooped up in a small room filled with dirty, musty furniture, and in which all their little domestic operations are carried on. The adynamic fever, under these circumstances, is always protracted; the efforts of the physician are baffled, and all the remedies which he can administer are barely sufficient to prevent the patient losing ground; much less to conduct him to a safe and speedy convalescence. These are truths which plead in favour of those noble institutions, hospitals, and declare how necessary they are to the very salvation of the poor afflicted with the adynamic fever." 175.

We embrace this opportunity of observing that, although fever is a most prevalent and destructive disease in London, owing to its crowded population, the filthy state of many of its districts, and the wretched habits of its poor; and, although there is *only one hospital* appropriated to fever patients, the support it receives is very limited, and its annual income insufficient to cover expenditure the most reasonable. When we consider the contagious nature of this disease, the ravages which it makes when it enters a family, and the difficulty that is encountered in circumscribing its influence, we cannot help being astonished that an enlightened public can so long overlook the merits of an establishment, to which the lord is equally indebted with the peasant, and which lays claim to a liberal support, as well from the judicious and efficient mode of its management, as from the amount of good which it effects with means so limited.

Had our author confined himself to one form of fever, and had that form been significantly expressed by the term *adynamic*, his remarks upon the treatment in general, and on blood-letting in particular, would have, in our apprehension, been appropriate. But, when we consider that under this epithet he groups every form and degree of this disease, we regard his practice throughout as timorous, and his recommendation of the lancet, calculated to discountenance its use. After a few cautious observa-

tions in its favour, he winds up the subject by remarking, that "I regret to say, the information which I have been able to obtain on this point, leads me to the melancholy belief, that, within the last few years, adynamic fever patients have sustained more injury than benefit from the abstraction of blood." 186.

We cannot determine how Dr. B. has arrived at this conclusion, because we have no knowledge of the cases from which it is drawn; but we can safely and certainly aver, that our experience has led us to a very opposite conclusion. We have no doubt but, that during some epidemics, when the type of the disease is characterized by debility, and, in some constitutions, depressed by misery, worn out by nature, or exhausted by fatigue, that the abstraction of blood must either be very limited, or entirely abstained from. But we are not aware that our author makes the above remarks with such peculiarities in view. His language is general and unrestricted, and as such we oppose the doctrine it conveys. Fever, in the abstract, as it has lately appeared and now exists, is not an adynamic affection, although it may become so by the peculiarities of the subject it invades, or of the circumstances attending its attack. Whenever it is seen in the low and *adynamic* type, it is seen modified by some contingent cause, and, therefore, a corresponding modification of treatment will be necessary. But such cases are exceptions to a general rule, variation from the natural portrait; and, although it may be safe and prudent to arrange them into one class, to designate them by a specific title, and to prescribe for them a certain plan of treatment, it is imprudent and unsafe to confuse the exception with the rule, the variation with the standard, and subject a whole genus of disease to curative means only adapted to a species. At the commencement, and during the first stages of fever, blood may, in general, be safely and successfully drawn, apportioning the quantity to the power of the pulse, and the inveteracy of the other symptoms; and we fear that he, who will seal up his lancet-case, and feed his patient upon bark at the outset, will ere long have, at least, as many facts from which to draw a different conclusion, as Dr. B. can advance in support of the one we have extracted.

Our author is opposed to the internal use of mercury, believing it to irritate the mucous membrane of the alimentary canal, and thus to dispose to or accelerate ulceration; but, while he prefers rhubarb alone, he admits that there are some instances in which it may be had recourse to with advantage, and strongly recommends its employment externally. As we concur entirely with his views on this point, we shall beg leave to give his sentiments in his own language.

"One of the characteristic conditions of the adynamic fever most difficult to combat, and most desirable to relieve, is the diminution or suspension of the secretions; and the power of the mercurial frictions to restore the secretions exceeds all other remedies, and is, indeed, very remarkable. I have witnessed such speedy convalescence from the operation of mercurial friction, that my mind is quite made up, as to the propriety and utility of this remedy. I believe it may be advantageously employed in all urgent cases of the adynamic fever; and, particularly, when the brain is much affected; as, where there is oppression or lethargy from fulness of blood about the head; where there is restlessness and noisy delirium; or, where inflammatory action is going on; and, indeed, in all cases, and at all times, when the return of the secretion is obstinately protracted. It has quite astonished me, on some occasions, to see how quickly the tongue will cast off its dry brown or black thick coating, the lips and teeth become moist, and the skin soft, and the brain resume its natural functions. Mercurial friction has produced more rapid and favourable changes in very severe cases of the adynamic

fever, than any other remedy I have ever seen administered. The average quantity to be rubbed in is half a drachm of the ung. hyd. fort. twice a day." 192.

There is no point connected with the treatment of fever, which is involved in so much obscurity, and requires more judgment and experience, than the use of sedatives and stimuli; and we are not acquainted with one general rule by which to be guided in their administration. We have seen opiates exhibited in cases apparently the most favourable, where constant tremor, jactitation, and watching evinced much nervous irritation, but without any good, and frequently, with a bad effect; and it has not seldom occurred, that we have witnessed their beneficial operation in instances where the untutored observer would have, *à priori*, denounced them as misapplied and injurious. The same remark is equally applicable to the use of stimuli in the last stages of fever, and we would recommend the greatest caution in the employment of all such medicines, believing that they invariably do harm, if they fail producing the effect for which they were intended. In cases which seem to require them, they should be at first given in very small doses, increasing, diminishing, or entirely withholding them, according to the nature and amount of the effect produced; as, we are convinced, that the most experienced can seldom tell before-hand whether, by their employment, he is going to relieve his patient, or aggravate his symptoms.

With such views of these medicines we cannot adopt the following rules, that—

"When there is noisy delirium, wakefulness, and restlessness, with an accelerated and easily compressible pulse, hyosciamus or opium may be given, *whatever be the state of the other symptoms*, and will be found valuable remedies. When the adynamic fever has been unusually protracted, and the patient is much exhausted and emaciated, a small allowance of wine, as four ounces, will be serviceable, and accelerate convalescence." 193—196.

In some protracted cases wine may be and is useful, but we object to every thing in the shape of a general rule or principle upon a subject of such obscurity; and, still, of course, excepting peculiar cases and epidemics, we believe it will be found that he who knows most of the nature of fever, and has acquired the *tact* of treating it most successfully, will use the least wine and opium, and, when he does have recourse to them, will use them "with fear and trembling." In the language of our author, "nomine mutato, and if he is in doubt, let the doubt be opposed to the free administration of stimuli." p. 204.

We have now laid before our readers a tolerably minute account of the Doctor's leading views, as to the nature and treatment of fever; and having done so, it is not our intention to follow him through the minutiae of his practice, as we cannot, by such details, present either much novelty or information. His individual remedies we have individually considered, and the pages which follow he exclusively devotes in applying them to symptoms as they rise, in accordance with the doctrines already reviewed.

We, therefore, dismiss this very unique and ingenious performance with the belief, that the points, in which we differ, arise chiefly from the restricted views our author takes of the nature of fever, and, that could we adopt the doctrine of fever being "*in natura et semper*" *adynamic*, we could subscribe to many of the sentiments which we have considered it our duty to oppose. But, differing from him, as we do, on this fundamental point, and believ-

ing, as we must, from the facts we have seen, and the observations we have made, that fever presents as many varieties of symptoms as there are varieties of causes, constitutions, and circumstances, and that it may appear under every grade of inveteracy, from the most putrid type, where life is seen sinking in a mass of rottenness, up to the most intense phlogistic character, where the lancet must be handled and handled freely; we have been compelled to impugn many positions that were perfectly consistent with the author's leading doctrine. Fever must not only be seen to be described, but it must be seen under every changing form which changing circumstances can attach to it. In one epidemic its prominent feature is debility, in another it is strength. In one, enteritic symptoms will be found to predominate, in another, disorder of the head. In one constitution every important organ will successively feel the influence of its power, in another it distributes its excitement in equal proportion throughout the body, passing along its stages without characterizing its attacks or stopping its progress, by any local affection, or leading symptom.

All these varieties must be seen and studied, and every modification of feature must be marked and noted, before we can, either with safety or success, sit down to delineate a faithful portrait. Had Dr. Burne confined himself to a certain epidemic, or to a certain combination of febrile phenomena entitled to the epithet he employs, his work had not occasionally sacrificed its fidelity to Nature for the sake of conscience, and the claims which it certainly has upon public patronage, had not been deteriorated by a comparison of the limited applicability of the principles it inculcates with the extensive magnitude of the subject which it treats.

XIII.

ON ASTHMA.*

SPASMODIC or periodical asthma has been confounded, even by Hoffman, Floyer, and many others, with dyspnoea, or difficulty of breathing, a phenomenon produced by very many organic affections, as chronic catarrh, hepatization of the lungs, hydrothorax, and the various diseases of the heart. It is not difficult to see the mischief which must have resulted from this confounding of affections of the most different kind. But the modern school of Continental pathologists have run into an opposite extreme, and have denied the possibility of a purely spasmodic or periodical asthma—because they have found the same symptoms accompanying organic dis-

* M. Ferrus—Laennec—Lullier—Winslow—Forbes—Rostan, &c. &c. &c.

eases. The indefatigable Laennec has taken great pains to disentangle the question of the difficulties with which it has long been surrounded, and as his work is not yet sufficiently diffused through the profession, we shall lay a brief exposé of his sentiments before our readers in this article.

With the view of showing that spasmodic asthma may exist, without any violence to physiology, he endeavours to prove that there are circular fibres around the bronchial ramifications, beginning at the point where the cartilaginous circles terminate. Analogy, he thinks, must lead us to admit the existence of the same kind of muscular fibres in the smaller branches, and even in the air-cells.

"Taking this view of the subject, it is very conceivable that the spasmodic contraction of these fibres may be carried the length of obstructing the air passages to such a degree as to prevent the transmission of air to a great portion of the lungs. For these reasons, we cannot regard the tonic spasm of the bronchia, or even perhaps of the air cells, as impossible; since every muscle is susceptible of spasm. Besides it is by no means demonstrated, that muscular fibre is the only contractile tissue; indeed, the contrary is proved by the fact, that animals of almost a mucilaginous consistence, are capable of evident contraction." 408.

Laennec is convinced that the lungs are possessed of an active power of expansion, as well as contraction.

"If (says he) we lay open one side of the chest of a living dog, we find the lung at first reduced to one fourth of its former dimensions; but even in this state we observe it swelling and contracting with an alternate motion. This fact was noticed by M. Roux (*Mélanges de Chir. &c.* p. 87) who further remarks, that we cannot account for the escape of a portion of lung in the case of a wound of the chest, but by an active expansion of the viscus itself". 409.

The protruded portion has been observed to be dilated during inspiration, a result which, he thinks, could not be occasioned by atmospheric pressure. Many other reasons are adduced by our author for this inherent power of expansion in the pulmonary tissue; but we confess that to us they appear rather unsatisfactory—and moreover unnecessary. An attack of purely spasmodic asthma is rarely fatal—hardly ever so without giving rise to congestions of blood and other consequences of disordered respiration, which, by modern pathologists, are looked on in the light of causes of the asthmatic paroxysm.

"I have met with many cases in which it was impossible, after the most minute research, to find any organic lesion whatsoever, to which the asthma could be attributed. An instance of the same kind is given by M. Andral (*Cl. Med.* t. II. ob. 11.) in the case of a fatal suffocation supervening to the suppression of a discharge from an ulcerated leg. The lungs in this case were sound, except that there existed in the left lower lobe a small hepatized point, of less extent than the tenth part of the lobe (*pneumonia of the dying*, according to all appearances.) The heart and the other organs were equally sound. M. Guersent has likewise seen two children die, after a few days, of a remitting dyspnoea, attended with dry cough and precordial anxiety, in whose bodies no obvious lesion could be found after death. (*Dict. de Med.* t. III. p. 126.) I am convinced that in the greater number of asthmatic cases, depending on dry catarrh and pulmonary emphysema, the asthmatic paroxysm can be induced equally by the supervention of a fresh catarrh (latent or manifest), and by a deranged state of the nervous influence, occasioning pulmonary spasm or an increase of the

necessity of respiration, and sometimes by both causes at once. In fact, I believe there are few cases of asthma owing to any one of these causes; and in old men more particularly, I imagine that several frequently conspire to produce the result. Of this kind are, debility, the ossification of the cartilages and immobility of the ribs, rheumatism affecting the walls of the chest, and perhaps also the tenuity of the air cells and of all the pulmonary vessels, in advanced life. With the exception of the different kinds of catarrh, the occasional causes of attacks of asthma and dyspnœa are almost always of a kind to give occasion to an immediate and evident disturbance of the nervous influence. Of this kind are, strong mental emotion; venereal excesses; the influence of light or darkness; retrocession of gout (an affection which, from its mobility and various effects, can only be considered as a nervous affection;) certain odours, such as those of tuberose, heliotrope, stored apples, &c.; changes of the atmospheric electricity, and other less appreciable conditions of the atmosphere. We thus find that the greater number of asthmatic patients cannot remain with impunity in a low close apartment, although containing much more air than they could consume in twenty-four hours, and although it is constantly but insensibly renewed by the doors and chimneys. Some cannot bear, without experiencing a feeling of suffocation, that any person should go before them, or that any thing should be brought close to them; while others, on the contrary, are never more subject to dyspnœa than when in the midst of a vast plain. The following fact, communicated to me by one of my colleagues, affords a curious example of a nervous affection of a similar kind, in a person not subject to asthma. A man forty years of age, slightly hypochondriacal but otherwise in good health, wished to go on horseback to pay a visit some leagues distant from his house. As soon as he left the town where he resided, which is situated in an extensive plain, he felt an immediate oppression on the chest from the impression of the country air. He took no notice of this at first; but the dyspnœa having greatly increased, and being now attended by a sense of faintness, he determined to return. He had scarcely turned his horse, when he found himself better; and in a few minutes he recovered both his breath and his strength. Not suspecting any relation between this momentary uneasiness and his journey, he once more attempted to advance, and was again soon attacked with the dyspnœa and faintness. On turning towards the town these passed off. After having made repeated attempts to proceed, and always with the same result, he finally returned, and in just as good health as when he set out." 414.

Treatment. Since the periodical asthma commonly depends on the reunion of several organic and nervous affections, it is necessary to investigate each case with accuracy, in order to get at the elements of the disease. Thus, in many cases, it will be found to depend on catarrh, latent or manifest, and it is in such cases, that emetics, alkaline salts, squills, ipecacuan, have been found so useful. For the nervous part of the complaint, a great number of remedies have been recommended; but nothing is more variable than their effects. Some will succeed in one person and fail in another. Even in the same individual, the same medicine will produce different effects at different periods. Narcotics—quiet—darkness, have generally a good effect. Narcotics may act not merely by lessening the necessity of respiration, but also by overcoming the spasm of the lungs; "and we ought, therefore, to have recourse to them in every case where exploration of the chest enables us to detect either of these changes in the condition of the nervous influence." Opium and colchicum we have found to be the most powerful means of shortening and mitigating the paroxysm. Where the asthma takes a decidedly periodical character, with somewhat regular intervals, the tonic class of remedies is indicated, as iron, arsenic, and bark. M. Laennec has employed the carbonate of iron with much success, whether

the asthma depended on dry catarrh or was purely nervous. "Whatever be the occasional causes, or the elements of the asthma, we must never omit blood-letting, whenever the lividity of the countenance, the strength of the patient's constitution, or the over-action of the heart, indicate pulmonary congestion; but we must be careful not to abuse this practice, which, in general, only produces a temporary advantage." We shall introduce the following short passage from one of Dr. Forbes's notes.

"Among the remedies best deserving notice in asthma, I would mention, a mild and spare diet, residence in a more temperate climate, and warm bathing. The first of these measures will be found very beneficial in cases complicated with gastric irritation; the two last are especially indicated in that class of cases which date from the disappearance of cutaneous eruptions under the use of powerful external applications. This method of cure is, I am convinced, the fruitful source of many internal irritations and inflammations, and, among others, of bronchitis and asthma. Although the doctrine of repulsion may be deemed by some theorists somewhat obsolete, I feel assured that its truth will be assented to by most observant practitioners of experience. I therefore consider it my duty to caution a student against a practice, which accords too well with the energetic empiricism so much in favour in this country, not to be readily adopted from analogy, even if not inculcated by positive precept." 419.

As asthma seldom continues long without inducing some changes in the lungs or heart, even if it has been purely spasmodic at the beginning, so we should not regard the disease so lightly as some have done. We have known it argued at insurance offices, that people who had spasmodic asthma for many years, were good and unexceptionable lives. We are not of this opinion. Because we see many asthmatics live to a good old age, we are not thence to conclude that no others have fallen victims to the malady. We see and remark the living:—we soon forget the dead! In all cases, we should institute a rigorous inquiry into the condition of the heart and lungs, in order to ascertain whether they are the seat of lesions, whether primary or secondary. When these lesions are detected—and they will too often be detected if carefully sought for, then our chief object should be to obviate their tendency, and prevent their aggravating the spasmodic disease.

P. S. In the present Number of this Journal, p. 208, will be found an account of the lobelia inflata, as a specific for spasmodic asthma. Mr. Snowden, chemist, in the Haymarket, has procured some of the plant, and is preparing a tincture according to the formula given. We recommend a trial of this medicine.—*Ed.*

Periscope ;

OR,

CIRCUMSPECTIVE REVIEW.

"Ore trahit quodcunque potest, atque addit acervo."

[12th APRIL, 1828.]

1. TRAUMATIC TETANUS.—MR. ABERNETHY

This distinguished lecturer, after describing the symptoms of tetanus, "which seems to be chiefly a muscular affection"—takes notice of the great insensibility of the nervous system—remarks that "alcohol will not fuddle a tetanic patient; opium will not make him sleep; mercury will not salivate him." This last observation is incorrect. Tetanic patients are very frequently salivated. On coming to the treatment, the lecturer displays great erudition. "Hippocrates has told us almost as much about this disease as we have known ever since."

"He says that, in certain cases of tetanus, where the fits increase, and there are exacerbations of the symptoms, the patient generally dies on a particular day—I do not exactly remember on which, but not far distant from the commencement of the disease."—*Lectures, p. 22.*

If Hippocrates had been able to tell the particular day on which a tetanic patient would die, he would have told us much more than the subsequent experience of 2000 years has enabled us to ascertain. It is a pity that the worthy lecturer did not refresh his memory by a peep into the works of Hippocrates, before he attributed to the Father of Physic such wonderful sagacity. This particular day is as follows:—"Hic, tertia die, aut quinta, aut septima, aut decima quarta perit." *De morbis, III. XIII.* That the sly old man of Cos has, like Dr. Moore in his prognostications, left himself pretty many loop-holes to creep through, in case of necessity, must be obvious enough. That a tetanic patient may happen to die on one of those days enumerated within the fortnight, is very probable—but that

he is just as likely to die on one of any other four days within the same period, we venture to assert.

Hippocrates has gone a little farther than our present knowledge warrants. He says, if the patient survives the 14th day, he will recover. This is not the case. In respect to treatment, the lecturer tells us that Hippocrates recommends the cold affusion as the *most effectual* remedy in tetanus, not traumatic. But the fact is, that the Father of Physic makes this the *very last item* in his *methodus medendi*.

"Huic catapotia ex pipere et veratro nigro devoranda dato: et jusculum volulicrum pingue calidum. Inducendæ sunt etiam fortes ac multæ sternutationes et fomenta adhibenda." *ib.*

Finally he says:—

"Quod si voles, aquam frigidam plurimam superfundito, et postea vestimenta tenuia, pura, ac calida superintegito." *ib.*

Such are the directions of Hippocrates, lauded by Mr. Abernethy, as confirmed during the progress of medical science," and, in truth, comprehending, "all that is known with regard to the treatment of this disease."

It is no wonder that medical science should be over-run with error, when errors, like these, are taught at the very fountain of knowledge!

"I know (says Mr. A.) of no specific remedy for tetanus. The application of the cold affusion seems to be only administering to a symptom. It lessens muscular action, (query,) at least for a time, because whatever lessens the temperature of the body, lessens muscular action."

But Mr. A. does not tell us that the temperature of the body is preternaturally increased in tetanus—indeed he could not do so with justice. And is it

true that *muscular action* is decreased by the application of cold ? We hardly have seen a more contradictory and inconsistent medley of observations than are portrayed in this lecture on tetanus. After the eulogy on Hippocrates, who recommended the black pepper and cold affusion, we were surprised to find that Mr. Abernethy had ventured to improve on a plan which was considered as embracing all that we knew of therapeutics in this formidable malady.

"I can only say, that we ought to pay especial attention to the removal of that irritation of the nervous system, which so constantly arises from a disordered state of the digestive organs. It is difficult to get the bowels to act in tetanus, but it is a most essential point to attend to their secretion. The abdominal muscles act with so much difficulty in this disease, that there is little fear of overdosing your patient. Give calomel and jalap with treacle, which will answer better than saline medicines. If a patient is delirious, or is so violent that he cannot be induced to take a dose of medicine, I watch an opportunity when he opens his mouth, put a gag into it, whip the medicine with a spatula over the tip of his tongue, and then take out the gag. I have purged patients in this way, when I knew not how I should have accomplished it in any other manner. When the calomel and jalap have been administered till they act on the bowels, they will at last generally bring away such stuff as people who have never seen it, can have little idea of. I remember, on one occasion, asking an old nurse what sort of evacuations had come from a tetanic patient, who had passed a week without having any: 'Lord, Sir, they are not stools—they are sloughs!'"

Mr. A states that, in a patient who had taken large quantities of opium, 30 drachms of opium were found undissolved in the stomach. This may serve to show that there is something in the stomachs of tetanic patients that prevents the operation, or even the solution of opium. How this man could have retained *solid* opium so long in his stomach, where there must have been fluids constantly in contact with it, is almost incomprehensible.

The lecturer notices the curious fact that tetanus sometimes comes on, when

the wound has become clean, and the cicatrix rapidly advancing. The strength and the bias of *system* are well illustrated in the lecturer's mode of accounting for this untoward event. During the sloughing state of the wound the "*DIGESTIVE ORGANS*" become disordered, and this disorder produces tetanus when the wound is healing ! If disorder of the stomach and bowels were capable of inducing tetanus, independent of wounds or other causes, we should soon have a thin population in this country !"

2. REFINED FOOD AND EDUCATION OF CHILDREN.

Under the above head, Dr. Leonard Stewart has made some ingenious observations, in a little work "*On Tendency to Disease*," which, we think, are not undeserving of notice. The Doctor properly remarks, that the pliancy of the human constitution, in enduring various modes of living, though great, is not unlimited. It exists in greatest force from puberty to middle age—though its abuse often dates from an earlier period. Infancy is subject to epidemic and accidental diseases, as well as other periods—and, in refined life, children have to labour under the effects of hereditary weakness, and over-officious care.

"We see tender parents begin their toil of meddling and indulgence, by over-exciting young people, and giving them food which is too fine and too nourishing. Articles of diet are sought out entirely freed from coarse admixture or dross ; these soon pass from the stomach, which eagerly calls for a fresh supply of such easily digested matter ; but, containing, in large proportion, the elements of chyle, they remain long exposed to the process of assimilation in the small intestines, where the absorbing lacteal vessels have an excess of work. The desired end of this

* We learn by a letter in the last Medical Gazette, that Mr. A. denies the *correctness* of these lectures, whether as published in the Lancet, or in the volume in question. It, therefore, becomes the more necessary to examine the doctrines and facts which have so long passed current, as those of Mr. Abernethy.

ill-judged plan of nourishment, that, namely, of fattening and strengthening, is at first very frequently attained; but even this is a dangerous advantage; for, the intestines being clogged, in consequence of the undue *remora* of the alimentary mass, the foundation is often laid of habitual constipation, plethora, nervous irritability, and, probably, a tendency to suffer from any accidental cause of disease. In other cases, nutrition is checked at its source by the excessive stimulation of the organs which are destined to effect it; and, from congestion in the mesenteric region, glandular obstructions and marasmus are speedily induced. These causes operate with surer effect upon children from birth delicate, and who are kept from free exercise and the open air, either by constitutional inertness, or the short-sighted kindness of *mammas* and *grandmammas*.”*

The intellectual appetite is not less pampered than the corporeal. Anxious to keep evil at a distance, and, if possible, to forestall the age of reason and reflection, instructors prematurely inspire caution and suspicion, and are much too exclusive in their choice of employment for the mind:—

“Substituting their own cleverness for the instinctive demands of the restless curiosity and thoughtless enterprise of youth (which, expending itself upon every object, leads to an early acquaintance with danger, and begets the habit of struggling with difficulty,) they will have every thing select and safe; and capriciously misdirect that spontaneous willingness which ‘loves whate’er it looks upon,’ and knows no care until it is suggested by more cunning heads.”

It is impossible, as our author observes, to take Nature’s work entirely out of her hands—at least with impunity. Yet, great pains are constantly taken to make “young people see with old eyes,” and to “encumber them with help,” when they should be allowed to grow and expand alone. “They are kept from falling instead of being taught to recover themselves when down.”

“All this, however, is of trifling moment, when compared with the mischief-

ous ingenuity with which early talent and precocious disposition is forced and overdeveloped. The spur is used where the rein should be. Learning is aimed at through some short cut; pleasure is made easy and inviting: they come undiluted by dulness, unpurchased by labour—the rose without its thorn. The passions, eager for immediate gratification, will not endure the weariness of anticipation, and seize upon their bait; but, too young and too undisciplined to contain or digest their fill of occupation, they soon fly off to some new object which, in its turn, they but taste. In this way, neither pleasure nor employment is fully proved or dwelt upon; and the inclinations get a habit of fickleness and frivolity, which leads to general disgust. And when any of these half-tasted enjoyments is shown in the back ground of a long vista of toil and care, as the reward of him who pursues the path of industry, unused to difficulty, the enervated youth shrinks at the means of success, and imagining that he has tried every thing, he despises the end of exertion. Thus cloyed, but not gratified—sophisticated, but having no real knowledge—the spoiled children of weak, indulgent parents, exhaust the freshness of their halcyon existence; and when the stubborn realities of after days are forced upon them, all the charm, all the *couleur de rose*, of life is gone!”

There are many observations contained in Dr. Stewart’s work, which would be productive of much benefit to children, if they were generally distributed among the non-professional public.

3. EFFECTS OF ONANISM ON THE HEART.

Dr. Krimer has lately published some melancholy cases, illustrating the effects of this destructive vice, on the central organ of the circulation. We shall adduce one or two cases, by way of example, and then give Dr. K.’s diagnostic marks of this class of complaints.

Case 1. A young man, aged 22 years, consulted Dr. K., presenting the following phenomena:—His constitution seemed to have been robust—complained of

* “On Tendency of Disease of Body and Mind.”—p. 7—8.

pain in the præcordial region, accompanied by cephalalgia, anxiety, and palpitation. His tongue was clean, the eyes sunk, the edges of the eye-lids red, the countenance troubled and timid, the action of the heart very violent, the epigastrium sensible to the slightest pressure, appetite and bowels natural, pulse 86, full, but unequal. This young man had been living intemperately, and attributed his illness to over-exertion and fatigue, as a soldier. From certain evasive answers, and the general appearance of the patient, Dr. K. suspected onanism as the cause of the above symptoms, and delicately touched on the subject, portraying the terrible consequences which often result from that vice. The young man slunk away, without a single word of reply, and, for some months afterwards, carefully avoided the sight of the doctor. Dr. K., however, learnt that he became melancholy, taciturn, shunned society, especially the society of females, and spent the greater part of his time in reading medical books. Dr. K. went, uninvited, to visit this young man, and found him studying the "Manual of Beer." He presented a sad spectacle of pallor, debility, and anxiety. The heart was acting violently and irregularly, beating visibly over a considerable space, and audible at some distance from the patient. The epigastrium was still very tender to the touch. In this interview, the young man confessed his addiction to the vice in question, since the age of 14 years. Since the first interview, he had tried to break from the diabolical spell by which he was bound, but in vain. Dr. K. prescribed some sedative and antispasmodic medicines, and had the young man watched night and day for three weeks, to prevent a repetition of the vice. By these means the habit was broken, for a time, and the symptoms were greatly mitigated. But again he relapsed into his loathsome habits, and Dr. K. had recourse to a stratagem. By way of a local application, which was to act as a preventive, Dr. K. applied the caustic potash, which produced great ulceration of the prepuce, and this was kept up for several weeks. This effectually stopped the practice—the violent action of the heart subsided—and he ultimately got married, and continues to enjoy good health.

Case 2. A student in medicine, aged

21 years, had been addicted to this vice, since the age of fourteen. He was of feeble constitution, narrow chest, pallid countenance. He was propped up in bed when Dr. K. visited him, and appeared pale, dejected, his eyes sunken and haggard, with a surrounding blue circle, the head reclining forward on the chest, breathing short, action of the heart irregular, tumultuous, visible and audible—pulse full, hard, and 85 in the minute. There was heard, in the region of the heart, a tumultuous noise, like the boiling of water, or churning of a fluid. There was also a violent pulsation at the epigastrium, which was extremely sensible to pressure. He complained of head-ach, and had frequent attacks of epistaxis—pains in his arms and shoulders—nausea—bad digestion—in short, almost the whole catalogue of diseases to which humanity is heir! The Doctor candidly confesses, that he set down the complaint as enlargement of the heart, with sub-acute carditis, and treated it accordingly. But he soon found out his mistake, and, on close examination, the young man disclosed the real cause of this terrible commotion in the system. Two friends were appointed to sleep in the room with the patient, and watch him night and day, so as to prevent him from resorting to the baneful habits that had plunged him into this abyss of wretchedness. In order, however, to make more sure of obedience to his injunctions, he performed circumcision—the prepuce being naturally very long—and dressed the parts with irritating ointments, which effectually prevented all attempts at onanism. By this procedure, and some sedative medicines, the symptoms above-mentioned gradually subsided, and the young man was restored to health.

Some remarkable instances are detailed by our author, of this vice, in the other sex, but these we shall pass over. The following signs are considered by Dr. K. as diagnostic of cardiac affections resulting from onanism.

1mo. The hair is dry, not glossy, split at the extremities, and apt to fall off, especially from the fore-part of the head. In phthisical patients, and in those affected with real organic diseases of the heart, the hair is glossy and the reverse of the above.

2do. The eye is lack-lustre, hollow, watering, without expression, and often red at the edges of the eye-lids, with a surrounding circle of blue. It is the reverse in phthisis, and organic diseases of the heart.

3tio. The look is unsettled, timid, and the individual cannot bear the steadfast gaze of another person—a circumstance that is very characteristic.

4to. The head-ach is sometimes peculiar—inclining to periodicity—the pain radiating from the occiput to the frontal region.

5to. The sight is troubled or diminished—the appetite impaired—the tongue slightly furred—the breathing is often short, though the individual has the power of fully expanding the chest.

6to. There is almost continual pain in the stomach, with excessive sensibility at the epigastrium, but without the other symptoms indicative of inflammatory action in the mucous membrane of that organ. This pain, and this tenderness at the pit of the stomach, often exist where there is real organic disease of the heart, but they are by no means so constant.

7mo. There is great lassitude, with pain in the limbs, and especially about the loins and sacrum—disagreeable odour from the perspiration—somnia—inaptitude for mental or corporeal exertion—great depression of spirits.

Such are the phenomena which characterize this affection of the heart, when arising from onanism, according to the experience of our author, who has very narrowly watched the symptoms in a very great number of cases. What the actual condition of the heart is, in such cases, he cannot tell, none having died of the complaint, and consequently no post-mortem examination having been made. There can be no doubt, however, that the disturbance of function in the organ of the circulation is purely a nervous affection, and unconnected necessarily with any change of structure. The disgusting nature of the subject has prevented English writers from any description or investigation of the phenomena; but we are well convinced, from many cases which have presented themselves to our observation, and where the cause has been voluntarily confessed, or unexpectedly drawn forth, that a great number of car-

diac affections, as well as anomalous symptoms of disorder in other parts of the system, are owing to this destructive vice. We have, therefore, though reluctantly, been induced to draw the attention of our brethren to this melancholy item in the list of human failings, because it is, assuredly, a prolific source of misery—nay, of death.—HUFELAND'S JOURNAL, 1827.

4. INFLUENCE OF THE DIGESTIVE ORGANS ON THE MIND.

Mr. Cooke, in his recent publication, has not overlooked this curious and important subject, and, although he does not attempt the unravelling of such an intricate problem, he furnishes some cases in exemplification of the influence in question. We shall notice one of these cases.

A clergyman, of plethoric habit, consulted Mr. Cooke for what had been termed “determination to the head,” and for which his reverence had been well bled and purged by a physician and surgeon, without the least relief. He had now become extremely irascible, and “his existence was quite oppressive to him.” In his head he suffered extremely from a sense of tightness, heaviness, and irritation, without any vertigo, confusion of thought, or defect of memory. The tongue was furred, the bowels irregular, the excretions unhealthy. Alteratives, bitters, aperients, and a more generous diet were ordered—and antimonial ointment was directed to be rubbed over the shaven scalp, as Mr. C. considered “that the disorder of the head consisted of a spasmodic affection of the occipito-frontalis muscle, and some of the muscles of the face.” The patient improved in general health; but the contractions of the occipito-frontalis, &c. continued. He then took the carb. ferri, under which he farther improved. In a country village where he went for a few days, he was seized, while walking up an ascent, with an increase of the cerebral affection, by which he was much alarmed, and a medical gentleman who was called in, hearing the patient's vivid description of his sensations, considered the case as one of great urgency, if not danger. He proposed immediate phlebotomy, and—“when he

saw the patient hesitating, he imprudently told him that, the pupils of his eyes were dilated, and he would not answer for his life for *five minutes*, if he were not bled." Bled he was—and blistered too—by which a temporary relief was afforded; but the strength was reduced, and the spirits more depressed. Mr. C. was summoned—prescribed aperients, and light tonics. "He gradually improved; but at the end of a fortnight returned home worse than when he left."

"The great imprudence of directing the mind of a morbidly susceptible man to a particular and very uncertain symptom as indicative of apoplexy, was often strikingly exemplified. He daily watched the pupils of his eyes, and soon he thought they appeared larger than usual. Though previously in a pretty comfortable state he became exceedingly alarmed, and the perturbation of mind reproduced throbbing of the head and a sense of confused intellect. I was sent for peremptorily, and preparation had been made in expectation that the lancet must be used, though he almost regarded it as signing his death warrant. He described the state of his head in the most pathetic terms—throbbing—giddy—confused—and almost every other formidable epithet was borrowed to define his sensations. His pulse, too, as might be expected, was rapid and strong. It was easy to perceive that his descriptions were exaggerated, and that the sensations he suffered were the result of nervous excitement. He was assured that there was no danger, and after soothing fears and giving him a glass of wine, he soon became tranquil, and the affection of the head subsided without resorting to means of an exhausting nature."

We have often witnessed such instances as the above. While inditing this short article, a gentleman who had been reading a popular work "for the use of families," became convinced that he laboured under some disease of the heart, and repaired immediately to a physician in the city. The doctor, no doubt, found inordinate action of the organ, with every now and then an intermission of the pulse. He ordered a number of leeches to the region of the heart, and afterwards a blister. The patient slept none of the following night, and on the third day, we saw him. The action of the heart was really tre-

mendous, and while examining the chest by the stethoscope, the pulsations appeared ready to beat through the ribs. We immediately desisted, and made an excuse that we were obliged to write an answer to a note, during which the patient was requested to read a newspaper which was on the table. This apparent *sang froid*, on our part, had evidently some effect on the patient. We purposely prolonged the writing of the note, and in a quarter of an hour, the action of the heart was quiet and regular. He was told that, this time, he must pay a guinea for nothing—for he required no medicine—the leeching and blister had completely removed the disease. He buttoned up his waistcoat, and putting down the fee, declared he never paid one with greater pleasure in his life.

But to return to Mr. Cooke's patient. Having been sent to Brighton, he was there seized with a paroxysm similar to those already described, "and under his perturbation a physician, rather celebrated for his knowledge of *one form of cerebral disease* (query, who is this monomaniac medico?) was sent for, and immediately ordered cupping." The patient remonstrated against bleeding, which he was told would be injurious, when the Brighton physician "descended from his dignity, and applied to him epithets of vulgar abuse." Cupping, therefore, was employed and repeated, and the poor patient got worse and worse—in fact, "he was rapidly sinking, but by means of a postchaise and four, he escaped once more to London. Mr. C. found him in a state of great depression, with quick pulse, white tongue, much debility. Bark and bitters, with gentle aperients were ordered. Under this treatment, aided by country air, and strict dietetics, he recovered health of body and tranquillity of mind.

There is no doubt that the rage for bleeding in all local demonstrations of chronic complaints does much harm. It is the same with drastic purgation in deranged states of the digestive organs. It is rather a wrong principle, however, to inculcate on the minds of irritable nervous patients, that "bleeding will never agree with their constitutions"—a notion which they are very tenacious of afterwards, and thus they embarrass their medical attendants when real inflammatory diseases occur. We see ridicu-

ious instances of this very often. We do not, therefore, much wonder that the Brighton physician was worked into a rage at finding this pocket precept thrown in his face by the reverend patient.

menses, however, did not re-appear till the month of March, 1827. She now continues regular, and in the enjoyment of good health."—*Journ. Complem. Feb. 1828.*

6. PERIODICAL CONTRACTION OF THE LOWER EXTREMITIES AFTER SUPPRESSION OF THE MENSES.

Dr. Fallot, a distinguished physician, at Namur, has published a curious case illustrative of the anomalous affections which often follow interruption of the catamenia.

Case. A strong country-girl, being then in the period of menstruation, was pursued by a dog, which she believed to be mad. She was greatly frightened, and the catamenia were suddenly suppressed. This was in May, in 1826, and in December of the same year, she consulted Dr. F. there being no return of the uterine discharge, although leeches innumerable had been applied to the labia, &c. and semicupia had repeatedly been used. In the month of September, she began to experience a sense of troublesome formication in the lower extremities, attended with painful twitchings, which she could not prevent by any effort of the will. In October, these twitchings amounted to convulsive contractions of the legs, by which the heels were brought in approximation with the hips; and any attempt to stretch out the legs produced severe pain. This state of rigid contraction lasted five days, and then ceased. At the expiration of a month, the same phenomenon returned, lasted four or five days, and then vanished. In all other respects, the patient appeared to be in perfect health, being plump, ruddy, and strong. Dr. F. now conceived that the complaint depended on a periodical congestion in the vessels of the spinal marrow or its membranes—and therefore ordered 30 leeches on each side of the spine, at its lower extremity, between the loins and os coccygis. The flow of blood was abundant; but, three days afterwards, the contraction returned, though not in a violent degree. When the spasm vanished, the leeches were several times reiterated, in the course of the succeeding month, and the contraction returned no more. The

6. MODES OF MEDICAL PRACTICE.

In a report published in the Philadelphia Journal, by Dr. Jackson, there are some good remarks on the three principal plans of medical practice, now generally pursued in Europe and America,—viz: the *Medicina Expectans*—the *Medicina Perturbatrix*—and the *Medicina Physiologica* of Broussais. The *First* is the most ancient, and is founded on the fact, that the animal economy is capable of correcting, to a certain extent, deviations of the natural actions, constituting disease. We see even the most acute fevers and inflammations run a course—come to a crisis—and terminate favourably. In short, we every day see the recuperative powers of the constitution, were it not for which, the Doctor would make but a bad figure sometimes. This was the practice of the ancients, and is still influential on the Continent, especially in France, where the works of Hippocrates are in great esteem. It would probably be beneficial if a greater leaven of this were introduced into English practice.

The *MEDICINA PERTURBATRIX* reigns universally in the British Isles—and pretty generally throughout America. Here as there—"Nature is disclaimed as an auxiliary, and her efforts are regarded as more mischievous than beneficial. To use the language of Rush, "Nature, when the physician enters the sick-room, is to be turned out of doors, as a noisy cat creating a disturbance."

In acting on this principle, the object is to cut short the disease, at once, and therefore, the most energetic means are employed. "The kingdom of heaven suffereth violence, and the violent take it by force." Matt. 2. This is a text, Dr. Jackson says, which is adapted to this school. Heroic remedies are "thrown in," with ceaseless activity—every organ is called into action—every function is disturbed—every emunctory is forced open, in order to drive through it the disease, as if it were an entity.

"Bleeding, vomiting, purging, sweating, urination, salivation, expectoration, stimulation, rapidly succeed each other, and not unfrequently are attempted all at one time; remedies become every thing; they are regarded as omnipotent; nature, the conservative powers of the system, are sunk into nothing, their sanative influence is unknown, or superciliously treated with contempt; though happily for the patient, those despised powers, often triumph over the disease, physis, and the doctor, combined to his injury."

There is a great deal of truth in the foregoing remarks, more especially as relates to chronic diseases. These heroic medicines are, in the highest degree, perturbing in their actions, and possess a degree of activity not inferior to any, and superior to most of the morbid causes by which diseases are generated. If this be true, we may form some idea of the mischiefs which is done by strong medicines in the hands of ignorance and temerity! We fear there is great room for reform in this important department of medical practice.

7. EXTENSIVE SPINAL DISEASE.

A young man, 26 years of age, born of phthisical parents, and who lost two sisters by pulmonary disease, took to the occupation of chimney-sweeper, at the age of twelve, and led a drunken, and irregular life—sometimes sleeping on wet straw, in barns and out-houses, Summer and Winter. After a night spent in this way, he experienced some stiffness in the lower extremities accompanied by weakness. These spread to the arms—and, in the course of a year he became affected with vertigo in the head, and tremor of the limbs. These incapacitated him for his occupation. One day he fell some yards down a chimney, and cut his head against the iron scraper; but the wound healed, without much difficulty. Nevertheless, the trembling, and weakness of the limbs, increased very much after this accident, and he was obliged to seek refuge in an hospital. When received, he presented the following symptoms:—tremor, and even convulsions, (on making any exertions) in the upper extremities—inability to stand or walk, without

stumbling—heat and sensibility of the surface natural—no pain in any part of the spinal column—constant sense of vertigo—no head-ach—chest well formed—respiration easy and deep, with the power of lying in any position—all the secretions and excretions natural—appetite good—intellectual faculties weak.

The disease was considered to be, effusion into the vertebral canal, with some affection also of the head. A seton was made in the nucha, and various remedies were prescribed, which we shall not here enumerate. Moxas were also applied to the spine. A long, and pretty severe course of tartar-emetic, however, nearly removed the tremors and vertigo. The patient had got to the quantity of 24 grains of tartrate of antimony in the 24 hours. But the patient did not gain strength, and he left the hospital uncured. In July, 1826, he had another fall down a chimney—bruised his chest—and spat blood, with cough, pain in the thorax, and other symptoms which led the medical attendants to suspect serious mischief. A violent fever supervened, and again he entered the hospital. On examination, no disease of the lungs could be ascertained, but the heart was found pulsating at the right side of the chest. The expectoration indicated approaching phthisis, and was mixed with blood. After various vacillations, and a variety of remedies directed towards symptoms as they arose, anasarca came on, and the miserable patient sank exhausted, on the 16th November, 1826.

Dissection. There were several vesicles filled with fluid between the dura mater and pia mater—the latter membrane was every where thickened and opaque—substance of the anterior lobes of the brain remarkably dense—six ounces of clear water in the ventricles—no disease of cerebellum. The spinal marrow was examined with great care. Nothing wrong appeared in its coverings. When these were slit open in front, the spinal marrow bulged out in five different places giving the appearance of five salient points composed of whiter substance than the rest of the cord. On examining the two superior projections, the structure of the cord was found disorganized, and changed into a substance resembling thick pus. Beneath the third prominence there was found imbedded in the spinal cord,

a solid body, of a kidney shape, and extremely vascular. A similar substance was discovered in the fourth projection. Between these salient parts, the spinal marrow presented a natural appearance. The lungs were disorganized—partly tuberculous, partly suppurated. The heart and pericardium were unaltered.—*Journ. Complem. Feb. 1828.*

We shall not enter into the numerous remarks and reflections which the author has appended to this curious case. It is evident that great disorganization both of the brain and spinal marrow must have obtained, at the time when this miserable man was pursuing his avocation of chimney-sweeping, four or five months before his death!

8. ANGINA PECTORIS.

Mr. Cooke, in his practical and very valuable Treatise on the "Digestive Organs," has made some observations on angina pectoris, which will be found to coincide with the opinions we have ventured to promulgate respecting this distressing complaint. Mr. C. remarks that this disease is, "perhaps generally connected with ossification of the coronary arteries, and a degeneracy of the muscular structure of the heart." With the latter part of the sentence we agree, but not quite so with the former. Indeed, we think, the following passage from Mr. Cooke, will negative the doctrine of coronary ossification.

"I have met with numerous instances of ossification in the coronary arteries which had never been attended with symptoms of angina; and cases of the latter have fallen under my notice where there was no ossification of the nutrient arteries, but there existed opaque depositions and other traces of disease at the root of the aorta and origins of the coronaries, and likewise that flaccidity of the muscular structure which is usually found after this disease. Therefore, it is not essential that ossification should have taken place, although ossific depositions are commonly found either in the course of the vessels or at their origins."

"Mr. C. thinks that paroxysms of the disease are occasionally produced by derangement of the digestive organs, especially by dyspepsia. We shall give the

particulars of a case related by our author at page 275 of his work.

Case. An Essex maltster, aged 65 years, who had lived temperately and enjoyed good health, except being troubled, for some years, with flatulence and constipation, was seized, about three weeks before his death, with severe pain across the chest and down one arm, which he was unable to move, lest the motion should cause instant death. In a little time, the attack subsided, and he felt tolerably well. Three weeks after this first attack, he travelled outside of the coach to London, and, though well clothed, he felt very cold. He was seized in Mark-lane-market, with pain in the epigastrium, extending beneath the sternum, for which he took some brandy, but without relief. He retired to a friend's house in White Chapel, where he complained of what he called "violent rheumatism of the left arm," especially about the wrist, connected with agonising pain across the thorax and epigastrium.

"I was called in about five o'clock, when the preceding details were given me. He described the anguish as still very keen not only in the body but in the arm; yet he appeared to respire without much difficulty. He had excessive flatulence, and experienced slight relief from frequent eructation. His pulse was 90 and not hard, and his tongue was clean.

"I prescribed for him some calomel and opium in conjunction with opening medicine, and at half-past nine o'clock was informed that he was more easy. His friend remained in the room with him till one o'clock, and then left him still better. At four the servant went into his chamber, when he reported greater amendment; and at six his niece visited him, when he felt so well as to talk of going into the country by the morning coach, but, on being told that it snowed, he consented to defer his departure till I had seen him. At eight o'clock he gave instruction as to his breakfast, sat up in bed, conversed cheerfully and energetically with his nephew, spoke of his relief with gratitude to the Almighty, when suddenly he complained of faintness, fell back on the bed, and instantly expired."

Such is the treachery and uncertainty of this terrible disease! The victim is generally in least danger when apparently

in the jaws of death—and suddenly expires, when free from suffering.*

Mr. Cooke examined the body in the evening of the day he died. The spleen was three or four times its natural size—there were some appearances of inflammation and thickening in the mucous membrane of the stomach—lungs healthy—an ounce of bloody serum in the cavity of the pericardium—"heart remarkably flaccid, and its fibres easily lacerable." The lining membrane of the chambers was unusually red, and, on the mitral and semilunar valves, were many opaque spots—"but, in no part, had ossification taken place." "*Arteritis* had existed to some extent up the aorta, and the posterior surface of the valves was more diseased than other parts." There was no appearance of disease in the coronary arteries, "except their orifices being involved in the morbid process going on in the aorta." Mr. Cooke observes that he has seen some other cases where the pathological characters were the same. This case and these observations tend to confirm the doctrine that a flabby state of the heart (very probably dependent on an affection of the nerves of the organ) is the most common of all post-mortem appearances. Mr. Cooke is, no doubt, well aware of the deception attendant on redness of the lining membrane of the heart and arteries. He did not, of course, pronounce that there was actual *arteritis*, without being fully convinced that he was not led into error by changes that take place after death.

9. FUNCTION OF THE LIVER—USE OF THE BILE.

In Mr. Abernethy's lecture on this subject, there are some curious opinions delivered. Dr. Powell told him—and he is himself convinced that, "there is no peculiar matter in the bile which gives it its bitterness and colouring." Mr. A. thinks they must depend "on some arrangement which we do not understand. He has not made up his mind whether the liver be an organ for separating some-

thing noxious from the blood—or elaborating something necessary for chyli-faction. It is evident, however, that he does not place much faith in the chylifactive properties of bile. "I see patients, says he, whose biliary discharges have been suspended for months, and yet they seem to be well nourished." Now, if there is any thing better established by observation than another, it is the fact that suspension or vitiation of the bile produces a rapid emaciation of the body. In respect to sympathy, Mr. A. believes that disorders of the head will affect the stomach, and *vice versa*. In illustration of the influence of irritation of the bowels Mr. A. relates rather a dirty story of a London doctor coming home from a London Tavern dinner—and feeling very uncomfortable, being obliged to limp and creep over the ground. Having visited the Temple of Cloacina, on his way back, he got eased of such a cargo, that he "jumped and walked home with boyish alacrity." We do not see very clearly how this exemplifies the influence of intestinal irritation on the *mind*. It shows indeed, that it will affect the nervous and muscular powers of the body; but the lecturer might have selected numerous and interesting illustrations of this said irritation on the very highest faculties of the intellect—the judgment, the memory, the imagination, &c.

Mr. A. adverts to the influence of the hepatic functions on the mind, and repeats the old story of *hypochondriasis* being owing to "something wrong in the *hypochondrium*." What that something is, the lecturer does not say—but infers that it is the duty of medical men to "keep the functions of the liver as right as they can." It would be desirable to know *how* this is to be done! We apprehend that the perpetual reiteration of the blue-pill and black draught, is not the very best method.

In treating of organic diseases of the liver, the facetious lecturer observes "here I get over the ground rather lightly, for there are certain organs in the body which, if the vessels go into a state of diseased action, they seem to me to produce but one, or scarcely any thing else but one kind of morbid structure. It is an infusion of something into the interstitial parts, in larger or smaller masses, and this we call tubercles."

* See the case of General B——, in No. 16 of this Journal, page 431.

Unquestionably this is getting over the ground of pathology lightly enough!

On the question whether hydatids be animalcula or merely coagulable lymph, Mr. A. gives the weight of his opinion to the former doctrine. It would appear that Mr. A. was a good deal influenced in his determination on this knotty point, by the following occurrence. A sheep died of apoplexy, and when Mr. A. opened the head, "out has leaped one of those globular hydatids." To deny an independent existence to *bodies* endowed with such *sallant* propensities, and that without any legs or arms, would be unreasonable in the extreme. "If you catch one of them in this way, in warm water, you would undoubtedly think that there is vitality in it." We would advise Mr. A. to peruse the curious work of Rhudolphi on the subject of hydatids, and he will be convinced that what he only conjectures, has been proved over and over again many many years ago—long indeed before Mr. A. was born.

Mr. A.'s observations on gall-stones are extremely meagre. He says "there seems to be some law of crystallization prevailing among them." He thinks that very large ones sometimes make their way from the gall-bladder into the colon, by ulceration. This may be true; but Mr. A. ought to have known that the ducts themselves have become ulcerated, and that gall-stones have made their way into the duodenum—where they have also produced obstruction, and in a very few instances, death.

10. AMPUTATION DURING GANGRENOUS INFLAMMATION.

Notwithstanding the recommendation of Baron Larrey, the surgical profession seems very averse to have recourse to the *ULTIMATUM REMEDIUM* of amputation, while gangrene is advancing towards the patient's body. Still, in desperate cases, it is allowable to make use of desperate remedies. The following affords a ray of hope in such emergencies.

A private soldier, 22 years of age, of healthy constitution and sober habits, fell from the window of a convent (what he was doing there is not said) upwards of 30 feet high, (at Lima in Portugal) and

dislocated his right shoulder, at the same time fracturing both bones of his right leg, four inches above the ankle-joint. The fracture was compound, but the wound was small. Considerable depression was the immediate consequence of the accident and the fright. The fracture was easily reduced during the flaccid state of the muscles, but the leg was found to be much swelled, and much effusion of blood had taken place under the integuments, which were detached about two inches from the bone. On the day after the accident, the leg was still more swelled, without any increase of temperature, symptomatic fever, or local inflammation. The third and fourth days passed without any unfavourable symptoms; but on the 5th day, the leg became swelled, oedematous, and of a deadly pale colour, with a burning heat at the instep. In the night of that day, "a most rapid and disastrous change took place. The sixth morning presented the fore-part of the leg from the knee to the instep, in a state of gangrene; while the parts in the neighbourhood of the fracture were in that of complete sphacelus. The disease ascended rapidly along the limb, and had now gained the middle of the thigh, the stomach being irritable, the countenance sunk, pulse low and weak. Under these circumstances, Mr. Macdermott, the surgeon of the regiment, amputated about three inches below the trochanter major, "the integuments even there being discoloured and oedematous. The symptoms after the operation were formidable, but the patient rallied, under laudanum, and brandy, and although there was a good deal of sloughing of the cellular membrane about the stump, the man recovered, and the stump healed.

It was found that a splinter of bone, three inches long, had been completely detached from the tibia, longitudinally, and forced down between the lower portion of that bone and the fibula. Mr. M. considers this case as affording "a strong proof of the propriety of amputating without waiting for a line of demarcation to be formed, when the progress of mortification, as in this instance, threatened not only the loss of limb, but of life also."—*Ed. Journ. April.*

11. BURNS AND SCALDS.

The subject of burns and scalds excited a pretty *hot* discussion in the Westminster Medical Society during a late sitting, in consequence of a paper read by Mr. Bingham. We shall not, on this occasion, follow either the writer of the Essay or the orators who delivered their opinions on particular points of theory or practice; but we shall give a brief summary of the general sentiments that appeared to prevail on the subject under consideration. Oral discussions in medical societies have one advantage over written documents. The latter set forth the opinions or practice of an individual—or a compilation from books written perhaps ages before. In Medical Societies, we hear the sentiments of many men fresh from clinical practice, and who have not had time or temptation to work up their observations into a system, or strain their brains in the formation of an hypothesis. The papers brought before the Westminster Medical Society are, in general, much too long. They embrace etiology, symptomatology, pathology, and therapeutics—and the reading of a paper, nine-tenths of which are merely copied from the class-books of the schools, occupies one of the two hours dedicated to the meeting of the members. Insulated cases, or single points in pathology or practice generally elicit far more information from the speakers than these systematic *THESES*.

Burns and scalds may be conveniently enough divided into those which merely excite the skin, or produce vesications—and those which inflame or disorganize deeper seated structures, down to the bone itself. In all severe or extensive burns, however, there are some parts in one of these conditions, and some in the other. Burns may produce only effects on the parts burnt—or they may produce a shock *immediately* on the nervous system, resembling that which succeeds a concussion of the brain. It is evident that, in such cases, we must give cordials, stimulants, laudanum, till some re-action takes place, when we are to be very guarded in the use of these means. The excitement of the system—the fever, in fact, which follows some time after the infliction of the injury, is quite an-

other thing, and must be treated like all other sympathetic excitements of the system. In respect to local applications, are we to go on the stimulating plan of Kentish, or the cooling plan of other authors? Are we to apply refrigerating, that is, evaporating lotions—or oil of turpentine and linseed oil. There is less difference in these applications, perhaps, than is generally imagined. If a finger be burnt, by touching a hot poker, or by being sprinkled with boiling fluids, and we plunge it in cold water or snow, the burning sensation is instantly soothed, for a time, till the temperature of the application rises a little, and then we must plunge it afresh into colder materials. On the other hand, let the part be wetted and held near the fire;—the sensations are rendered, for a few minutes, much more pungent; but, after a little time, the pain is almost entirely obliterated—we mean, of course, in superficial burns. This illustrates we think, the operation of oil of turpentine and other stimulating applications to burns, both in the superficial and the deep-seated degrees. The experience of the Society—at least of those who, from local circumstances, had most experience, was in favour of Dr. Kentish's plan to all kinds of burns and scalds. Dr. A. T. Thompson advocated the beneficial effects of combining opium in solution with spirituous applications. Messrs. Skeene and Greene, who had practised in coal mine countries, where explosions of hydrogen gas produce such terrible consequences, gave their testimony to the stimulant practice—combined with opium and cordials internally. Purgatives were found to be very beneficial in severe burns. The author of the paper had taken no notice of the effects produced on internal organs, in severe injuries of this kind. It was shewn that inflammation of the mucous membrane of the stomach and bowels—effusions into the cavities of the pleura and brain, &c. were often the immediate causes of death in those cases which terminated fatally, some days after the first shock was over.

A gentleman detailed some cases from Bartholomew's Hospital, where the application of cotton, according to the plan reported by Mr. Plymsoil in a late *Fasciculus* of this Journal, was eminently beneficial. We understand the practice is now undergoing a fair trial in that hos-

pital, and the results will, no doubt, be soon made known.

12. TREATMENT OF SYPHILIS WITHOUT MERCURY.

The modern mode of treating syphilis without mercury, although supported, to a certain extent, by high authority, is not yet sufficiently established to render additional confirmation of its efficacy unnecessary. M. Fricke adopts a line of practice in the venereal cases which are admitted into the hospital at Hamburg, very nearly resembling that recommended by Thompson and other English practitioners. 1mo. Every patient is bled to the amount of from six to twelve ounces, and the operation is repeated if necessary. About half a drachm of sulphate of magnesia is then given every three hours, and continued until repeated evacuations are produced. If the bowels afterwards become constipated, or the ulcers heal slowly, the use of the same remedy is renewed. 2do. As an external application to the chancres, goulard water, or two grains of sulph. zinc, in six ounces of distilled water, is employed. When the size of the sore is much diminished, and it is no longer painful, lime water is used. If either of these lotions cause pain or inflammation, they are to be still farther diluted. Buboës are first treated by compression, and, if resolution cannot be promoted, they are opened with a bistoury, and afterwards dressed with dry lint. Condylomatous tumours are removed by the knife, or cauterized, and the wound dressed with the same lotion as for the chancres. 3tio. The patients are kept upon very low diet, consisting of vegetables, bread, and "soupe à l'eau," twice a day. 4to. If, at the end of a few days, the symptoms are not alleviated, a few doses of mercury, in small quantities, are given, and are found sufficient to effect a cure.

The results obtained by this mode of practice are highly satisfactory. Chancres and buboës are speedily cured, and the cicatrices are by no means so evident as when mercury has been employed. Chancres, from three to four lines in diameter, are generally cured, in female patients, in from one to three weeks. Rather a

longer time is required in male patients. M. Fricke, who has the advantage of retaining under his observation the patients thus treated, has not yet observed any secondary symptoms.—*Graefe and Walther's Journ. der Chirurgie.*

13. NEW METHOD OF TREATING SYPHILITIC DISEASES.

M. Dzondi, Professor of Halle, administers the corrosive sublimate in the following manner.

R. Deuto. chlor. hydrarg. gr. xij.; solve in aq. distill. q. s., et adde—

Micæ panis et sach. alb. āā. q. s. ut ft. mass. pro pilul. 240.

On the first day, the patient takes four pills (1-5 of a grain.) The second day he takes none. The third, six pills. The fourth none. The fifth, eight pills, and so on. The twenty-seventh day, 1½ grain will thus be taken, and at this time, in a great majority of cases, the cure is complete. During the treatment, decoct. sarsæ is taken as a drink, and the patient is restricted to half the quantity of food he was previously accustomed to take. Pork, game, cheese, milk, acid dishes, and spirituous liquors, are prohibited. He is only permitted to leave the house during very fine weather, and never either early in the morning or late in the evening. All external applications to local symptoms are to be carefully avoided. The change they undergo is to be the test of the action of the mercury upon the general system. The dose of the mercury is to be increased until some evident amelioration is perceived. Whatever may be the quantity, it is to be given at one time, and immediately after dinner. If colic or diarrhœa should be provoked, a few drops of laudanum are to be given. Besides the advantage which this method possesses, of effecting a radical cure, it does not cause salivation, is economical, and speedy. It rarely happens that the treatment lasts longer than a month. Dzondi assures us that he has cured all his syphilitic patients in this manner for the last ten years.—*Neue Zuverlässige Heilart der Lustseuche in allen ihren formen. Halle, 1826.*

HOSPITAL PRACTICE.

ST. GEORGE'S HOSPITAL.

14. OSSIFICATION OF THE CORONARY ARTERIES.

In the 6th Fasciculus of our last number, we took up the subject of angina pectoris, and alluded to the occasional, and, indeed, rather common occurrence of ossification of the coronary arteries in that disease. A short time ago a curious case occurred at St. George's Hospital, which afforded a good specimen of the pathological change in question, and was the occasion of a slight disagreement amongst the doctors.

W. Jones, æt. 72, was admitted, March 7th, under the care of Mr. Brodie, labouring under retention of urine. He stated that he had suffered from difficulty of making water, requiring the occasional introduction of the catheter, for the last ten years or more, and that he had recently been a patient in Bartholomew's Hospital, where Mr. Lawrence laid him on his belly, introduced his finger up the anus, and "broke some of the small bones of his back"!! On examining the rectum for a confirmation of this terrible tale, there was found a pretty voluminous cluster of common *pteryx*, some of which were in a state of ulceration, but no further evidence of Mr. Lawrence's shocking cruelty. A catheter was introduced, though with some difficulty, in consequence of a considerable enlargement of the prostate gland, and a quantity of bloody urine evacuated. The instrument was introduced regularly three or four times a day—the bowels opened, and suppositories of opium and conium administered to allay the extreme pain which the patient experienced in making water. On the morning of the 14th, he went to the necessary, returned, got into bed and expired almost immediately. He had never made a complaint of vertigo or of being subject to spasms of any kind, but his countenance was unhealthy, and he appeared to have drunk freely.

Dissection. The bladder was much thickened, and its mucous coat rough and granular; the prostate was exceedingly enlarged, and its middle lobe projected within the neck of the bladder, the size of a hazel nut. There were two

calculi in the bladder; a great many prostatic calculi; and half a dozen false passages, of various directions and dimensions, some leading into the prostate, and some through it. On examining the heart, it was found *enlarged and very flabby*, whilst its coronary arteries afforded a good specimen of the ætheromatous and calcareous depositions within their coats. Besides this, there were full two ounces of serum in the ventricles of the brain.

Remarks. Thus far our reporter. He has not seen quite so many cases of this kind as ourselves. The large and flabby state of the heart was far more likely to be the cause of sudden death in this instance, than the calcareous depositions in the coats of the coronary arteries.

15. CURIOUS MALIGNANT TUMOUR GROWING FROM THE VAGINA.*

E. B. æt. 23, after a fall, noticed a small tumour on the right side of the vagina, which gradually increased, giving her, at times, very considerable pain. She made no mention of the disease until it had existed for nearly two years, when she entered St. George's Hospital, under the care of Mr. Brodie. This was in the month of February last, and she then presented the following appearances:—From the anterior part of the vagina, just below the clitoris, there arises an odd-looking, circular tumour, about the size of a walnut. It pushes the orifice of the meatus urinarius to the left side—its lower half is encircled by a prolongation of the vascular lining membrane of the vagina; whilst its upper is rough, of a yellowish-brown hue, and sloughy appearance, having evidently protruded through the lining membrane, as the fungus arising after chronic inflammation of the testicle does through the ulcerated scrotum. The tumour was so circumscribed, that Mr. B. imagined he could get his finger in some measure behind its root; the *os tincæ*, and other parts were sound.

She was kept quiet, in the hospital,

* London Med. Gazette, No. 16.

for nearly a month, at the end of which time the tumour had decidedly increased in size, and put on a more sloughy appearance. Under these circumstances, it was thought advisable to have recourse to that *dernier resort* in such cases, the knife, and on the 11th March, the operation was performed by dissecting off the vaginal membrane from the base of the tumour, and then completing its separation from the parts beneath, with the handle of the scalpel. This was accomplished with much ease, care being taken to avoid injury to the urethra, and on making a section of the diseased mass, after its removal, it was found to present a malignant appearance, although neither true scirrhus nor fungus hæmatodes. Bleeding took place from a vessel at the bottom of the wound, when the patient had become warm in bed, so that it was necessary to apply a ligature, and pledgets of blue lint. These means were effectual in arresting the hæmorrhage, and the patient at present is going on very well.

In the report which contains the above, there is related a case of "preternatural abdominal pulsation." The patient is affected with disease of the spine, the lower dorsal vertebræ projecting backwards, and the aorta can be felt pulsating very strongly at the umbilicus. At one time a distinct tumour was felt in this situation, possessing most decidedly the aneurismal thrill, and having many of the characters of an aneurismal dilatation of the vessel. As the affection of the spine improved, this tumour disappeared, and at present the aorta is felt beating of its natural calibre. The reporter imagines that the curve *backwards* in the dorsal vertebræ, will naturally induce, as indeed always happens, a corresponding curve *forwards* in the lumbar vertebræ, in order that the centre of gravity may fall within the base of the column. This unusual convexity of the loins will of course render the abdominal aorta more prominent than usual, and this accounts for the pulsation which it presents.

MIDDLESEX HOSPITAL.*

16. CASE OF HERNIA, WITH OBSERVATIONS AND ORIGINAL ILLUSTRATIONS.

A man, æt. 47, who had been subject to the disease for twenty years, was admitted into the Middlesex Hospital on the 10th February, with scrotal hernia on the right side, which could be readily reduced within the ring. It appeared that the gut had not descended for five years previously until the evening of the 7th, when he felt sick and vomited. On the 8th, he applied to a druggist, who attempted ineffectually to reduce it, but a surgeon who saw him in the afternoon, succeeded in removing the tumour, so that he could push his finger into the external ring. The patient was relieved, but the bowels could not be moved, although he took, in all, between the mornings of the 8th and 10th when he was admitted into the hospital, fifty grains of the ext. col. comp. and sixteen of calomel as well as several enemata. On his admission, there was constant vomiting—tyimpanitis, fluttering pulse, &c. and he was ordered by the house-surgeon castor oil, laudanum, and a clyster. Three motions were obtained, but the man died in the night. The hernia came down repeatedly during the day, but each time could be readily returned.

Dissection. On cutting into the abdomen the intestines were found blown up with gas, and highly inflamed. On opening the sac there was found a knuckle of intestine, the coats of which were more pulpy than natural, and of a dark brown colour, in some places, indeed, perfectly black. The stricture was seated in the neck of the sac, and the gut at this point was soft and apparently ready to ulcerate. Around the neck of the sac the peritoneum was detached from the inside of the abdominal muscles, and hung in a loose fold. It was now evident that the intestine had never been properly reduced, but the sac, with its contents, had been pushed back successively through the outer ring, inguinal canal, and inner ring behind the abdominal muscles, tearing down the connexions between these muscles and the peritoneum, opposite the

* Med. Gazette, No. 16.

internal ring. The description in the report is none of the most lucid, and it is eked out by two wood-cuts, which only serve, after all, to make the *obscurum obscurius*.

We really think that the true state of the case might have been guessed at during life without any very great difficulty. When a hernial tumour, after having been irreducible for many hours, can be pushed up out of sight, but immediately returns, and the symptoms of strangulation continue unabated, the natural conclusion is, that it is the *sac* which is reduced, whilst the stricture still remains. This stricture cannot be in the outer ring, neither can it be in the inner, for the herniary tumour can be readily returned through both; where then can it be but in the neck of the *sac*? The conclusion is almost inevitable, and the practice as plain—an operation as soon as possible. We do not believe that any operation would have saved the patient's life at the time he was admitted into the Middlesex, because the symptoms were then so far advanced as to mark general peritoneal inflammation; but we do believe, that were such a case to occur again, the surgeon would be fully warranted in operating, under tolerably favourable circumstances in other respects.

Whilst noticing this case, we may be excused for introducing one or two which we lately had an opportunity of witnessing, where hernia was complicated with hydrocele, rendering the diagnosis, in some measure obscure. We are aware that there are some folks who say there is no difficulty in the matter, and affirm, that the surgeon who mistakes another affection for hernia, or hernia for any other affection, knows nothing of his profession, and deserves to be cashiered! It may be all very well to enunciate a proposition like this in a medical society, because it makes the vulgar stare, and the orator is thought a "knowing fellow," but those who are engaged in practice, occasionally find, to their cost, that the sailing is not always so smooth, as these garratteers would lead them to imagine.

A young man was admitted some little time ago into St. George's Hospital, at about 11 o'clock in the forenoon, with all the symptoms of "acute" strangulated inguinal hernia. There was great anxiety

of countenance, a hard but low pulse—sickness—constipation—pain on pressure of the abdomen, all the symptoms, aye, and strongly marked too, which were laid down in the Westminster Society as diagnostic of strangulation.—There was much tension of the tumour, which was large, and appeared to consist of more than a common hernia. The man was half tipsy, and no accurate history could be obtained, save that he had been engaged in a drunken fray in the morning, had received a blow or strain in the scuffle, and had immediately perceived the swelling in the groin. He was bled, purged, put into the warm bath, and the taxis employed without the slightest effect, so that it was determined to operate at 4, P. M. In the mean time, however, cold, by means of the sulphuric ether, was employed, and just at four o'clock, when all was ready for the operation, and the faces of the pupils, collected from far and near, were dimpled at the prospect with "smirks and wreathed smiles," the house-surgeon felt something "go up," and the patient declared he was in heaven! A very considerable tumour still remained, and it ultimately turned out that the patient had for some time been affected with a clap, and that the tumour was caused by a combination of common hernia, varicocele, and hernia humoralis! All this was evident enough in the course of a few days, but we would have defied any one, even were he as clever a personage as Mr. Lambert himself, to have distinguished them on the man's admission.

Another case occurred at the same hospital within the last fortnight which is worth recording. A young man, a groom, was admitted with a tumour in the right groin, having all the characters of a strangulated scrotal hernia. It was tense, painful, and stretched from the scrotum up through the outer ring along the inguinal canal to the internal ring. The testicle could be felt below, but there was some degree of enlargement about it, which gave a degree of obscurity to the case. The history which the patient gave was confused and unsatisfactory, but it was evident that he had been subject to the occasional appearance of a tumour in the groin since childhood, that it would remain down for some time, attended with severe symptoms, and then disappear spontaneously. The tumour des-

ended, in the present instance, on the morning of his admission, whilst exercising a horse; he felt sick at the time, afterwards vomited, and the bowels were constipated. The warm bath, bleeding to syncope, and the taxis, were tried in vain; then the sulphuric ether and bags of pounded ice were applied, but these also failed. As a dernier resort, independent of the operation, a tobacco enema was thrown up, and when its effects had shown themselves on the system, the taxis was employed, and the hernia reduced. Still a tumour remained, evidently a collection of fluid, but where that fluid was situated it was not so easy to determine. The testicle was a good deal wasted, and there was hydrocele of the tunica vaginalis, that was clear—on raising the scrotum, however, or making pressure on it, the fluid, in a great measure, disappeared from the tunica vaginalis, and passed along in the course of the cord, as high as the inner ring. It could not be forced into the abdomen, so that it was not congenital hydrocele, and on coughing, the gut descended in front of it. What the exact nature of the case may be it is difficult to say, but we have detailed it, because, with the former, it proves that hernia, when complicated with hydrocele or enlargement of the testicle or cord, is exceedingly obscure in its history and symptoms, and further, that such complication may give to the hernial tumour an appearance of extent and danger which in itself it really does not possess.

17. ANATOMY.

We are glad to see that petitions are preparing for Parliament from all parts of the town and country, and that there is every chance of a committee being granted for the purpose of inquiring into the evil and the remedy. In the mean time, we are convinced that nothing is so likely to prejudice the cause as public discussions on the subject in newspapers and other popular periodicals. The crude speculations which are there emitted respecting the remedy for scarcity of subjects, cannot but increase the prejudices which now exist, and engender others not yet

in operation. The inquiries made by the committee will elicit all the information that can be desired—and the remedy should flow from this information, and from such suggestions as may be tendered by the witnesses.

In the mean time, we have to draw the attention and the sympathy of the profession to the case of a young medical gentleman, Mr. Davies, an apprentice at the Warrington Dispensary, who, with some others, has been prosecuted, *for having in his possession*, a body that had been disinterred, for the purpose of dissection. The corpse was that of a young woman, a farmer's daughter, and the prosecution appears to have been carried on by a society of Baptists, to which the father belonged. As one great object of the present application to Parliament is to rescind the law that punishes the *possession of dead bodies*—not the *resurrection* of them—and as the trial of this question has cost the parties a large sum of money, and the question is to be again tried in the Court of King's Bench, it behoves the profession to come forward at once, and raise a subscription for Mr. Davies.

An extract from Mr. Brougham's defence will put our readers in possession of the merits of the case, and therefore we shall here insert it.

"Mr. BROUGHAM said his Learned Friend, the Sergeant, had seemed to anticipate, in his very temperate, judicious, and skilful statement, that he (Mr B.) might deny that there was a law which rendered it an offence indecently to disinter a body. He meant not, however, to deny any such thing. Whilst he said that dissection was necessary for the good of the living,—that there was no other means of saving the life of man from disease and accident than by the examination of bodies after death, he did not deny that exhumation might be carried on in a way to outrage the feelings of the community. But the jury were not to suffer their feelings of delicacy or decency to carry them away, or to make them satisfied on slight evidence that the defendants were the persons engaged in this transaction. The defendants were charged with two several matters: the first, which was variously put in the first two counts of the indictment, was for a conspiracy to disinter indecently, for the purpose of

bringing away a certain individual body for dissection: the second, which was contained in the last four counts, was simply for receiving, and having in their keeping, a body for the purpose of dissection, knowing that it had been unlawfully disinterred. It was material to keep these two charges quite distinct in their minds. He should endeavour to show that there was no evidence to convict the defendants, *Davies* and *Hall*, for whom he appeared, of either of these two charges. The second, they would observe, was not the mere having a body for the purpose of dissection; he might have this lawfully: the offence was in having a body, knowing it to have been unlawfully, that is, indecently disinterred. It was an observation applying to this, in common with all charges of conspiracy, that, when it was once proved that the offence had been committed by some one, nothing was so easy as to hook in, as it were, and attach to the body of the evidence, any other person who had had any connexion with, or touching of, the subject from beginning to end. It was hardly possible for any one to approach or speak to, much less to have any dealings with, any individual connected with the subject-matter of the misdemeanor, without furnishing evidence which would hook in a person as a party to the conspiracy, even though the evidence was extremely slight. If, indeed, it had been proved that two persons were seen going to the grave and taking the body, and that, as they went or came away, they were joined by a third person, they would naturally conclude that that person was engaged in the conspiracy. But how different was the present case! It was not pretended that the gentlemen for whom he appeared had ever had the slightest connexion with the persons who went to Hill Cliff. The jury did not know who went there; but suppose, for example, that Box and Ashton had gone, (of which there was not the slightest evidence,) still there was not a tittle of evidence to connect *Davies* and *Hall*, or *Blundell*, with them. If a person had goods in his possession which he could not account for, and which had been stolen, the inference was strong that he had received them, knowing them to be stolen; but he should show that no such inference arose, or could arise, in the present case, from the particular nature of the traffic. They had evidence from the

prosecutor himself, (for *Dr. Moss* was subpoenaed for the prosecution,) that the common way in which bodies were obtained for dissection was by purchasing them from unknown persons, or without the knowledge of the surgeon as to where the bodies came from. And be it remembered, that, without dissection, anatomical and surgical studies could not be carried on;—that young men carried on these studies in the course of their surgical education;—that professorships of anatomy had been established by the Crown in our Universities;—that those professorships were useless without dissection, and that dissection could not be carried on without a supply of dead bodies. The mere having of bodies, therefore, for the purposes of dissection, was not only lawful, but positively encouraged by law. But the way in which bodies were commonly obtained, was, that a resurrection-man, as those men were called, who procured bodies, no matter how, either by disinterment or by importing them from abroad, came to the surgeons offering a body for sale, and that the body was purchased, bought, and paid for, without the surgeon knowing any thing of the manner in which it was got. This being the case, the inference usually arising from the possession of other kinds of property, was at an end. This fact was of the utmost importance, and on this he would be content to rest the case, for the question was neither more nor less than whether a surgeon should ever, henceforth, be allowed to dissect a subject, or whether surgical science should be acquired. The question, therefore, was, whether there was any thing in the evidence to show that *Davies* and *Hall* had not been as ignorant of the way in which this particular body had been obtained, as *Dr. Moss* was: or whether their own account of the purchase of the body, from a man unknown to them, for four guineas, was not the true one. The account which *Hall* gave before the magistrates, and which *Davies* gave to *Dr. Moss*, perfectly concurred; they both stated that the body was to be brought by a person unknown to them. There was, therefore, an entire disconnection between the fact of the disinterment, and the having the body. The practice of dissection was never, even in the most barbarous periods of the history of this country, considered illegal. There was, indeed, a law passed in the reign of

James I., of sapient and sacred memory, against having bodies for purposes of witchcraft; and the same statute prohibited a dealing with unclean spirits; (*laughter*.) but this indictment was for the disinterment of a body indecently, and for receiving it, knowing it to be so disinterred. Under any other circumstances, it was not unlawful to have a body for the purpose of dissection; and there was not a tittle of evidence to convict his clients of having obtained the body by unlawful means. If the jury should go so far as to say, under the second charge, that if he took a body into his possession, and dissected upon it, without knowing any thing of the manner in which it was obtained, he was therefore guilty of an offence: let their verdict plainly say so, and let all the frightful consequences follow. But they would say no such thing. Dissection was encouraged, nay, patronized by the law. The body might have been brought from abroad, for any thing the defendants knew: it might have come from a country like France, where surgeons had a right to dissect bodies of persons who died in certain circumstances; or from a country where the bodies of galley slaves were given for dissection, as in the South of Europe, and indeed in France; or from Ireland, whence bodies are constantly imported into this country. The more strongly the disinterment of bodies was prohibited by law in this country, the more he was bound to presume that any body found in a dissecting-room was lawfully obtained. The young men, his clients, were students in surgery—decent, attentive, diligent young men, following the necessary studies of their professions,—and with characters such as they had heard from the witnesses for the prosecution, was it to be presumed that such persons had obtained a subject in an unlawful manner? With these observations he submitted the case to the jury, confidently trusting to their good sense and sagacity in sifting the evidence under these two distinct heads of charge; and he confidently looked to their sound, manly good sense to guard them from such a decision as mere uncontrolled feelings might be calculated to produce."

"Mr. BARON HULLOCK; in charging the jury, said that, to prove a conspiracy, it was not necessary that all the parties should be shown to have been together, but if, from all the circumstances of their con-

duct, it was to be presumed that there must have been a previous concert, that would be enough to establish the charge. But as conspiracy was an offence of serious magnitude, they should be satisfied, before finding a verdict of guilty on the former part of the indictment, that the conduct of the defendants was the result of previous concert. There was no evidence against Ashton, who must, therefore, be acquitted. As to Box, the evidence was very slight. If they thought the rest, or any of them, were in possession of the body under circumstances which must have apprized them that it was improperly disinterred, the jury would find them guilty of the latter part of the charge. Blundell's being a stationer did not relieve him from suspicion, for his brother was in the Dispensary. The only bodies legally liable to dissection in this country, were those of persons executed for murder. However necessary it might be, for the purposes of humanity and science, that these things should be done, yet, as long as the law remained as it was at present, the disinterment of bodies for dissection was an offence liable to punishment. The amount of that punishment must always depend on the circumstances of the case. The only evidence against Hall was his own account given to the magistrates; they would judge whether that clearly showed him to have had a guilty knowledge of the way in which the body had been obtained.

"The jury deliberated for a few minutes, and then pronounced Davies and Blundell *Guilty* on the four last counts, which charged a possession of the body, with knowledge of the illegal disinterment; and *Not Guilty* of the charge of conspiracy.

"Hall, Box, and Ashton were *acquitted* of the whole charge.

"☞ The moral effect of this trial is to exculpate all the defendants from any thing like conspiracy to procure the disinterment of the body of Jane Fairclough, or any other body. A body had been disinterred, and was offered to certain parties to whom it might be supposed to be useful. Two of the defendants only have been found guilty of receiving a body which had been so previously obtained, and the jury infer a knowledge,

on their parts, that it had been illegally disinterred. The mere legal effect, then, of the trial is to raise this point, namely, whether a person obtaining a subject for dissection, under any circumstances in which he cannot be connected with the disinterment, is punishable as having received it, knowing it to have been unlawfully taken from the grave, if it so happens that it has been so taken by persons unknown; or if the defendant cannot prove it to have come from abroad, or to be the body of a person executed for murder in this country. The Court of King's Bench will have to decide, therefore, whether Mr. Davies and Mr. Blundell are guilty, or not, of any offence whatever; and in every point of view the question now raised, and in its present shape, must be highly interesting to the public generally, and to the medical profession particularly. Its decision will be of national importance, if its merits be efficiently argued in the Court above, and will lead to the settlement of the existing, or the adoption of a new, law on the subject."

We earnestly urge our brethren to come forward on this occasion, with sums, however small, in order to defray the expences of the lawsuit past and that which is to come. Having only received the document under consideration just as the last sheet of this fasciculus was going to press, we had not time to solicit subscriptions. But we put down our own, and have no doubt that the example will be quickly followed by others.

SUBSCRIPTION FOR MR. DAVIES.

[The List at Mr. Highley's Fleet Street.]

	£ s. d.
Medico-Chirurgical Review	. 5 5 0
James Johnson, M. D. 1 1 0

☞ *The names will be published or not according to the wishes of the subscribers.*

18. HOSPITAL REPORT IN THE LANCET.

The following protest against a late report in the *Lancet* and several newspapers is signed by more than 150 students, four-fifths of whom were actual spectators of the operation which has been so misrepresented and falsified by some person or persons, to us, (and we suppose to all others,) at present unknown. We envy not the feelings of the anonymous reporter—nor even those of the editor,

who published such a statement, on the faith of some concealed assassin of character.

"ANATOMICAL THEATRE, GUY'S HOSPITAL.

"TO THE EDITOR OF THE MORNING HERALD.

"Sir,—We, the undersigned, Dressers and Pupils of the Borough Hospitals, have observed, with mixed feeling of surprise and regret, that in your paper of Saturday last, among the various channels of information, which in your official capacity as Editor you deem it your duty to explore, you should have selected from the *Lancet* of the same date, what purposes to be a report of an operation recently performed at Guy's Hospital:—of surprise, on the one hand, that you had no misgivings as to the truth and accuracy of the publication, no suspicion of the quarter from which your information was derived; and of regret, on the other, that, presuming guilt on such evidence, you should have given a temporary sanction and stability to the statement by inserting it in your highly respectable journal.

"But, Sir, as you did not stop to ask 'are these things so?' before giving them publicity, we at least expect that, in the impartial exercise of your censorship, you will readily repair the mischief your instrumentality has caused, by setting forth in those columns which contained the charge the following unanimous and unequivocal contradiction.

"Indeed, we should be extremely forgetful of the advantages secured to us by this institution, and but ill requite the kindness we have uniformly received, were we to 'spare to speak' at this moment when the character of one of its officers has been so foully and falsely assailed. Hence we feel we are called upon, in an especial manner, to justify the conduct of that individual; to testify to his qualifications as a teacher, to his superior skill as an operating surgeon, and to his worth and integrity as a man. We therefore formally protest against the defamatory calumnies which have been noised abroad, and avowedly declare that the report of the case, as given in *The Lancet*, is altogether amplified and exaggerated; that there is every distortion of facts, and insertion of what are not facts, to bring the operator into contempt, and to sully his fair character. But, as it would occupy too much space in your valuable columns to dissect out and falsify each assertion, we shall content our-

selves with affirming, that the protracted time of the operation was attributable to the unusual and extraordinary difficulties which presented themselves; that these difficulties were met and overcome by the operator with coolness; and that he neither used any expressions but those called for by the exigencies of the case, nor spoke in the unguarded manner which has been so maliciously, but ridiculously, imputed to him; and that the last assertion, viz—of the patient being kept upon the table *bound* whilst the operator was explaining—is only one of the many falsehoods that have been so meanly devised and industriously circulated against him.

"We have been thus brief in our contradiction of the statements, or rather the mistatements of *The Lancet*, because it is notoriously admitted as a fact among the reputable part of the profession, that to quote from *The Lancet* is at all times a ground for doubting the truth of such quotation. Besides, the spirit with which the report is written plainly disproves the sincerity of the production—*mole ruit sua*."

"But what we have said will suffice to show, that although the best among us cannot escape with impunity, there will always be found those who are ready, humble as their efforts may prove, to expose such personal hostility, and to assure the public that his attacks have the least effect where they are intended to do the most injury."

Here follow the signatures of nearly 200 pupils:

From a sensible and energetic letter in the same newspaper, and which is signed *ULTOR*, we select the following passage. It well deserves the serious attention of our brethren. The day is fast approaching, when the profession in this country will be irretrievably marked out as the scorn of all other classes of society, unless they follow the example set them by the medical students in the Borough, and show their detestation of the instrument of evil by determining never more to read it or encourage it.

"If, indeed, to tear aside the veil which decent custom has drawn over scenes of bitter trial incidental to our common nature,—to mock the agonies of afflicted humanity by burlesque associations,—to insult the memory of the meek and confiding sufferer now gone, and set his sorrowing relatives on the rack,—if to blast the character of the medical profession, and shake to its centre the public confidence

in it,—if these are to be the blessed results of the modern intellectual system, I say, Sir, it is an accursed system, and that it threatens to overturn all that it is our dearest interest to uphold—all that it is the fondest object of social as well as individual man to protect, cherish, and preserve.

"But, Sir, the motives of this hospital chronicler are the opposite of the liberality which he assumes; and this incalculably aggravates his wantonness on the present occasion. He affects to advocate the liberty of the press—he does but abuse it. He claims the patronage of a public which he deceives, by arrogating for himself a bold statement of the truth, which he forever falsifies, and of facts which he constantly distorts.

"March 29.

ULTOR."

19. MEDICAL CONVERSAZIONI.

"EMOLLIT MORES NEC SINIT ESSE FEROS."

We are rejoiced beyond measure to perceive that John Bull's "THIRD BRANCH OF THE FIFTH PAIR," has lately received a great accession of sensorial energy, and that the motility of certain muscles, supplied thereby, bids fair, in another season or two, to equal that of any of his neighbours on either side of the *SEMPLO*. It is quite refreshing to observe the *thaw* of ideas, (so long pent up and frozen in *JOHNNY*'s encephalon) when we enter the rooms of Sir Astley Cooper—Mr. Pettigrew, or, last not least, the splendid saloon of the *ROYAL COLLEGE OF PHYSICIANS*. It is not over a *cool* cup of tea or coffee, as over those maddening cups supplied by *BACCHUS* and *CERES*, that—

"Many a long repented word comes out."

No! these are the veritable "feasts of reason"—for in these rational *CONVERSAZIONI*, we renew (as it were) the "academic bowers" of classic times, and behold the *PLATOS*, the *ARISTOTLES*, the *LUCRETII*, and the *CELSI* of the day, all eager in search of *TRUTH*—and earnestly inquiring "*de omnibus rebus et quibusdam aliis*," of which there are generally some rare and curious specimens on the tables.

In these social meetings, we hail the harbinger of better times—the olive branch of peace in medical society, interwoven with the laurel, and superseding or banishing the blood-stained dagger and murderous tomahawk, introduced of late, as the principal instruments of—strange to say—the *HEALING ART*!

That the ANARCHISTS—the SEPT-EMBRISERS—the TRIUMVIRI* of the day, view, with great consternation, this “bond of union,” spreading among all that is respectable in our profession, may be easily perceived by the pains which they take to turn it into ridicule. We confidently predict that these medical CONVERSAZIONI will prove powerful auxiliaries to the reaction which is now taking place in the public mind against the most barbarous system of demoralizing warfare that ever disgraced a liberal and learned profession. A momentary adumbration has darkened the medical atmosphere; but the natural good sense, love of justice, and generous character of Englishmen, will shortly dispel the cloud; and exhibit the adumbrators and mercenary instigators in all their native deformity.

We are glad to see that the COLLEGE of PHYSICIANS has caught the rising spirit of the times, and thrown open its splendid library to these intellectual associations. The following is the card just issued from the College.

“The President and Fellows of the Royal College of Physicians will meet in the library of the College, for the purpose of reading medical papers, and holding medical conversation, at which they request ———’s attendance as often as it may be convenient to him, on all or any of the following evenings: viz. April 14—28; May 12—26; June 9—25. The meetings will be held from 9 till 11 o’clock.”

Sincerely do we hope and anticipate, that these meetings will multiply—and that, in the course of another year, the metropolis will afford an opportunity, *every night in the week*, for medical men to come together—shake the hand of friendship—communicate their thoughts—rub off all asperities—drown petty jealousies—stifle animosities—and unite in the christian and philosophic labour of promoting harmony and good will among all members of the profession.

* “The first TRIUMVIRATE was in the hands of Cæsar, Pompey, and Crassus, who, at the expiration of their office, *kindled a civil war*. The second and last Triumvirate was under Augustus, Anthony, and Lepidus, and, through them, *the Romans totally lost their liberty*. The Triumvirate was in full force at Rome for the space of about twelve years.”

20. THE ENGLISH IN RUSSIA.

“But we far hence to distant climes must go,
O’er Caspia’s deadly swamps, or Scythia’s snow !”

An official invitation has lately been given by the Russian Government to the young medical men of this country, with the view of inducing them to enter the military and naval service of the Autocrat. It is by no means improbable that the crowded, distracted, and impoverished state of the profession, in this country, may drive many young men to embrace the offer of a living, however low the salary, beneath a foreign sky. Perhaps the situation of some medical men here could not be altered for the worse, by emigration to the Crimea, or even Siberia; and it is quite certain that the profession at large, in this kingdom, would be infinitely benefited by the exile, forced or spontaneous, of a few hundred of those turbulent souls who are disorganizing the very frame-work of medical society, and tearing up the foundations of social order and harmony in the profession. But we fear that this class of evil-doers is too well paid for their *services* here, to think of enlisting under a Russian banner, where the *knout* would very soon be their portion. It is therefore to put the honest but indigent medical youth on his guard, that we have noticed the invitation of the Russian Government. We must, in the first place, remark that the pay, not exceeding 45 pounds per annum for the first class, is quite inadequate for any thing like a comfortable subsistence, even in Russia. But the pay is much worse than it seems;—for, except in actual warfare, the rubles are paid in *paper which depreciates them more than one half!* In the Russian service the officers are allowed no rations, except in the field, and the pay, as above depreciated, is not sufficient to keep body and soul together. The rigorous climate of the northern, and the unhealthy atmosphere of the southern provinces, would destroy the lives of three fourths of our youth within the first ten years of their servitude. Add to this, the misery of living among semi-barbarians, where every scene around them forms a representation of portentous despotism on the one hand, and mournful prostration of mind on the other! For our own parts, we would rather serve in the ranks of a regiment, or before the mast of a ship of

war, under the the British crown, than be dignified with the rank of officer among the hordes of Calmucs or Cossacs in the dreary regions of Russia.

—Quid terras alio calentes
Sole mutamus—patriæ quis exul
se quoque fugit ?

21. LITHOTOMY.

The ears of the profession have been recently shocked by the REPORT of an operation for the stone at Guy's Hospital. If ever it was permitted for "a perturbed spirit" in human shape, to visit this earth, in the character of a REPORTER—then was there one at the elbow of the operator, on this occasion ! The BEING who could indite, and send to the public newspapers such a report as that to which we allude—
"Is fit for treason, stratagems and spoils."

It is to be hoped, however, that, in the drama now acting on the professional stage, every incident will tend, directly or indirectly, to the completion of the final catastrophe—moral retribution ! Whether a DIVINE POWER governs the current of events in this world—or, as some imagine, the PRINCE OF DARKNESS may have a share in the direction, we leave for the determination of the philosopher. Of this, however, we feel assured—that the diabolical means which are now exerted to vilify, traduce, and assassinate the professional character of every public functionary, not belonging to a certain coterie, must excite—nay, has excited a sense of horror and disgust in the mind of every man who has a spark of honorable feeling yet lurking in his breast !

We have had but too many opportunities of witnessing—alas, of experiencing the untowardness of human nature ; but still we are convinced that no member of the medical profession, unpossessed by an "evil spirit," could have constructed a report, breathing such vengeful aspirations as are conveyed in the document to which we allude. The ANIMUS in which the report is conceived and indited, will stamp the anonymous author, whoever he may be, as a disgrace to a liberal science. This last act so far outstrips any thing which we have been

lately accustomed to see, that some exile from this upper world must have got loose from his prison house, or the wandering spirit of a Nero, a Caligula, or a Heliogabalus must have been allowed, for some wise but inscrutable purpose, to experience a second incarnation !

Of all the operations which the intrepid hand of the surgeon has dared, LITHOTOMY is the most hazardous, the most occult, and, consequently, the most difficult. In all other operations, the eye assists the hand—but here, only a single sense can come into play, and a thousand circumstances may tend to deceive that sense, and baffle the adroitest hand, and firmest nerve ! The bye-stander, therefore, who could premeditatedly transmute a failure into a fault—and, with hellish ingenuity of language and manner, hold up the unfortunate operator as the murderer of his patient, must be totally divested of every particle of philanthropy or even humanity. But there is a fire that can never be slaked—there is a wound that can never heal—there is a worm that never dies—there is a remorse which the tomb cannot stifle. These, these must surely become the tyrant tenants of a bosom to which Golconda's gems, Peruvia's gold can never again restore

"The soul's calm sunshine."

The anonymous assassin of character may mix with the crowd, and plunge his concealed stiletto into the breast of his neighbour, unseen by mortal eye. But when he lays his head on his pillow, a thorn will be there—and the voice of conscience will ultimately cry—

"Sleep no more—Macbeth has murdered sleep."

Then will the pallid cheek and sunken eye betray the canker feeding on the soul, and years of remorse, and, it is to be hoped, of repentance, will succeed the frenzied enjoyment of a few short days of vindictive malice ! Mean time, the evil is not yet at its height. Several years ago, we prophesied that the arm of the surgeon would be paralyzed, even in common and necessary operations, by the diabolical misrepresentations of malignant and unjust reporters. Our words have come true. No surgeon can now operate with safety, since every failure is blazoned forth in the newspapers, as an instance of ignorance or want of dexterity. The students, as well as the patients, will feel

the consequences of this infernal system, unless some measure can be devised to check its ruthless career. The impression, however, is every day becoming more general, that the utter degradation of the medical character is at hand—and

that medical men have been their own executioners in the encouragement which they have given to vituperative publications. The profession will learn wisdom in the school of adversity—but not till they are severely scourged for their folly.

VARIETIES.

22. *Enlarged Livers and Spleens removed by Iodine.*

Three cases of this kind have recently been reported by Dr. Milligan, from the Royal Universal Infirmary for Children, which appear to prove the superiority of iodine over mercury in glandular and visceral tumours. In the first case, the child was five years of age, and presented a tumour occupying the right hypochondrium, extending anteriorly in a line with the linea alba, and inferiorly to the superior part of the hypogastric region. It was firm, colourless, pushed out the ribs considerably, and was attended occasionally with shooting pains. The tumour had been perceived growing for six months. The child was put on a course of the tincture of iodine, and in about two months and a half the tumour was quite gone.

In the second case, the child was under two years of age, and had an ague when admitted. There was a tumour in the region of the spleen, said to be of eight months growth. Mercury had been used without effect, and Dr. Milligan ordered the iodine in small doses. In little more than a month the swelling was gone. In the third case the tumour was lower than the region of the spleen; but it gave way to the tincture of iodine.

23. *Gangrene of the Lungs not fatal.*

Some pathologists of this country deny the possibility of recovery in cases where a portion of lung becomes disorganized in a gangrenous way, and where this disorganization is supposed to be indicated by the black fetid expectoration exhaling the odour or mortified parts. Laennec and others, on the Continent, maintain the possibility of such an occurrence, and we are inclined to side with such a man

as Laennec, rather than with those who are opposed to him in this country. The following case was lately detailed by M. Laurent to the Parisian Academy of Medicine.

Case. Madam the Countess of L— had experienced from youth several attacks of hæmoptysis. In a journey which she made to Versailles, in 1823, she was seized with acute pain in the right side of the chest, which yielded to the application of 24 leeches, but which still induced an indescribable malaise of two or three days' duration. On the 4th day, she was seized with a violent and convulsive cough, succeeded by an abundant expectoration of greenish matter mixed with a black substance, emitting a horrible gangrenous odour. This kind of expectoration continued a long time, and it was ten months before she perfectly recovered.—*REVUE MED.*

24. *Paralysis from Cubebs.*

Mr. Broughton has related a curious case of this kind, in the person of a young gentleman, who had been taking the above-mentioned medicine for about a fortnight, in the dose of two drachms thrice daily, for a gonorrhœa, and being otherwise in good health, and living quietly. A distortion of the mouth to one side, whenever he attempted to speak or smile, supervened—and the pulse became irregular, with some other symptoms of constitutional derangement. He was bled to half a pint, without any advantage. Then he was freely purged, with benefit, but at the end of three weeks the distortion had not entirely disappeared. Was this not an affection of the portio dura, and the result of cold caught in the side of the head, rather than the effect of cubebs?—*MED. GAZ.*

25. TUBERCULAR AFFECTION OF THE SKIN. By DR. JOHN CRAMPTON.

[Transactions of the Association, vol. V.]

We have just received the fifth volume of the Dublin Transactions, and beg once more to congratulate our Irish brethren on the zeal and intelligence they continue to display in the work before us. This volume contains twenty papers, some of them of great length, and varying much, of course, in value. All these papers we shall examine in their turn; but, in the present fasciculus, we are obliged to select two or three of the shortest for the *Periscope*.

Dr. Crampton observes, that disorders of the skin are more or less connected with the state of the digestive and nutritive functions; and he is "disposed to think that still further insight may thus be obtained from external appearances on the surface, as to the condition of some of our most important inward organs, in point of soundness and integrity, or the reverse." But to the case.

J. Byrne, aged 56, a small emaciated man, was admitted into hospital for diarrhoea and rheumatism—but it was soon perceived that he laboured under phthisis, supposed to be tubercular. The appearance of the skin, however, attracted much attention.

"Large freckles and dark brown olive spots of various shape and size occupied the cuticle in patches; the interstitial spaces were only a shade lighter, being of a dirty dingy colour. In addition a number of tubercles of the same colour were observed on the trunk and arms, some broad, and gelatinous to the touch, about an inch long, and half an inch broad; others harder, like papulæ, about the size of a split pea; others again of a pyramidal form, attached to the surface by narrow, tough, peduncles. Some of these were about half an inch long, and about a quarter of an inch across their depending extremity. Those latter were hard to the touch, and felt cartilaginous, compared with the broad and boggy excrescences which were observed on some parts of the skin. But in those soft prominences small pisiform and hard nuclei were perceptible both to the sight and touch, as may be seen by inspecting the annexed drawing."

The patient stated that he had enjoyed
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good health till within twelve months of this time; but the alteration of the skin was of five years' duration, though it did not interfere with his health or avocations. He had been dirty and intemperate in his habits. The treatment was palliative, and the patient gradually sunk under the symptoms of phthisis. Dr. Crampton was anxious to ascertain if the tubercular diathesis should manifest itself in any of the inward organs or tissues. The following is the post-mortem examination.

"The body was wasted to the utmost degree of emaciation: the large freckles and irregular brown spots had disappeared after death, or were rather merged into a general dirty brown colour of a lighter shade, but of a uniform appearance. No change had taken place in the tumors or tubercles; the round and oval papular tubercles were of a caseous texture, penetrated the corion, and lay imbedded on the subjacent cellular tissue. On removing the cuticle a gelatinous substance appeared to pervade the cellular texture, especially under the broad and soft prominences; this gave the surface underneath a marbled appearance. The gelatinous substance afterwards disappeared, having become dissolved in the water, in which portions of the skin were macerated, and did not appear to have any connexion with the external marks on the skin. The pyriform tubercles did not penetrate deep into the corion; on cutting them out they were found to consist of a tough, white, hard, fibro-cartilaginous substance, no blood-vessels being visible through their texture. Some of the larger cartilaginous excrescences were hollow, and contained a glairy fluid.

"The lungs exhibited a diseased mass; tubercles in every stage. In the upper portion of the lobes the tubercles had degenerated into abscesses in a state of suppuration, and into cavities; in the middle portions tubercles beginning to soften, whilst in the lower they were small and hard. The heart was remarkably small, but the subject was rather diminutive. The liver hard, and dark-coloured, not enlarged, but giving a gritty feel to the knife; in fact throughout occupied with the *tubercula diffusa* of Dr. Farre. The spleen likewise in the same diffused tuberculated state. Mesenteric glands and kidneys free from disorder. The mucous membrane of the intestinal

canal red, and attenuated, with slight ulcerated excoriations, such as are usually met with in phthisical patients."

Dr. C. thinks we must view the cutaneous disease, in this case as a part of the general tubercular disposition, slowly but surely advancing—breaking up the texture of organs essential to life, and injuring the appearance and functions of those, at first sight, of less importance, but which, in the general harmony of the animal economy, cannot be overlooked. After remarking on the frequency of tuberculated conditions of various organs in other animals besides man, the Doctor informs us that—"not long since, when carving a hare at his own table, he was surprised to find the whole of the *fleshy and muscular* parts (what is the distinction between flesh and muscle?) of the body and limbs studded with white, cheesy, round tubercles, about the size of small peas." The Doctor adds—"my curiosity did not induce me to taste it." Dr. C. thinks we have no evidence of the removal of tubercles from the lungs—our object, therefore, must be, the prevention of their passing from the dormant into the active state. How is this best achieved?

"There are perhaps no measures which conduce more to prevent this unhappy termination, than a selection of good air, or a suitable climate, frequent change of scene, exercise in a carriage, riding, a long journey, or a sea-voyage. The diet should be nutritive, light, and restorative; the digestive organs, and the bowels especially, should be maintained in an active and healthy state. On the other hand, over-stimulating diet and fermented liquors in any thing more than what might be called minute portions, soon excite tubercular deposits, make them inflame, and undergo the successive changes already described, of which there was so excellent an illustration in the case before us."

26. CASE OF NÆVUS MATERNUS CURED BY VACCINATION.

[Glasgow Royal Infirmary.*]

Jane McGilpin, æt. 3 months, was ad-

* Mr. Plymsoll's reports.

mitted under the care of Dr. Young, October 22d, 1827. Has a roundish tumour on right side of chin, about the size of a sixpence, and prominent; it is of a purplish colour, and is apparently formed of blood-vessels. At birth, tumour was the size of a split pea, and has since been gradually increasing. Small punctures were made over surface of tumour, and vaccine lymph freely applied. In the course of eight or ten days, the tumour had become a vaccine pustule: a scab was thrown off, leaving the base of the tumour not quite eradicated; another suppuration took place, and a third, which, in the course of the ensuing month, effected a cure. Very important effects result from this simple method of treatment. Cow-pox is established in the system, whilst the tumour is as effectually removed as by the application of the ligature, or extirpation by the knife, (which are often productive of much constitutional irritation)—and, consequently, supersedes the necessity of these painful operations. Should the tumour be small, one puncture may suffice—if large, it will be necessary to vaccinate at several points. The size of the tumour is no objection to this method of treatment. The reporter is informed by Dr. Young, that he has attempted this practice in a case which occurred lately in private practice, and with the same beneficial results, although the cure was rather more protracted.

27. ON WHITLOW.

In the April number of our Edinburgh cotemporary, there is a very extended article (26 pages) on the subject of whitlow, in which Dr. Craigie has expended a prodigious quantity of medical and surgical erudition, in order to prove the good effects of early and deep incisions, when there is inflammation in the interior of the "digital synovial sheaths." In former times, there were numerous and able advocates for what Dr. Craigie and M. Roux call "premature incisions," in these deep-seated inflammations. In modern times, incisions (not premature) are advocated on a principle which Dr. Craigie contends to be erroneous—the giving issue to matter. "It is therefore

said that the surgeon must wait until he detect fluctuation—and then only should he use the knife."

"This reasoning, (says Dr. Craigie,) which is founded on a loose analogy derived from the general rules of opening abscesses, is erroneous in the extreme. It is the delay till suppuration takes place that renders incisions of little or no avail. The interior of the digital synovial sheaths is by no means similar to a portion of cellular membrane. They are fitted for containing the flexor tendons; and the very circumstance which enables them to give these tendons support and resistance in the motions of the fingers, viz. their dense and unyielding character, prevents the sheaths from doing more than merely containing them. The moment inflammation commences in their cavity as it spreads quickly over the whole, the swelling which ensues diminishes the cavity so much as not only not to contain easily the tendons there placed, but to induce quickly an extreme degree of compression. The unyielding nature of the fibrous case causes it to operate like a tight ligature over the whole course of the tendons. It thereby arrests mechanically the circulation within them; and this, as in other textures, speedily terminates in death of the tendon."

"For these evils the natural remedy, I conceive, is much earlier employment of the incision. To be efficient, indeed, the principle of this measure requires to be completely changed. Instead of using it with the view of opening an abscess and discharging purulent matter, it should be employed, first, as powerful and efficient means of local depletion; secondly, as the means of preventing that compression, which, by its mechanical power only, must speedily arrest the circulation in the tendons, and thereby produce mortification of their texture."

We apprehend that Dr. Craigie is mistaken in supposing that modern surgeons are in the habit generally of delaying the incisions in deep-seated whitlow, till there is evidence of matter being formed. It cannot be doubted that such a man as M. Roux should be acquainted with the sentiments and practice of the surgical world on this point. Let us hear what he says on the occasion.

"Ces incisions prématurées, faites pendant la durée de la période inflam-

atoire du Panaris, se trouvent recommandées par un assez grand nombre d'auteurs anciens, qui, à leur faveur, croyaient pouvoir donner issue à la sérosité âcre et corrosive qu'ils pensaient être cause de la maladie dont il s'agit ici :—elles sont encore mises en pratique, par la plupart des chirurgiens modernes, dans le double but de faire cesser la douleur, et de s'opposer, en arrêtant le progrès du panaris, &c.*

Here, then, we find Dr. Craigie expending immense time, labour, and ink, to prove the propriety of the practice of "the majority of modern surgeons." It is not a little curious, that the very surgeon from whom we have quoted the above passage, is labouring hard to show that this modern-ancient practice is decidedly injurious, and ought to be discontinued!

M. Roux divides whitlow into four species, according to the seats of the inflammation. The first is seated in the skin of the finger, and is merely an erysipelatous whitlow—the second affects the cellular tissue between the skin and the sheaths of the flexor tendons—denominated by M. Roux phlegmonous whitlow. The intensity of this species seems to depend on the density of the inflamed tissue, the great number of nervous filaments distributed through it, and the paucity of extensibility in the skin which covers it. The third species is, without doubt the most serious of all. It attacks the sheaths of the tendons and their synovial membrane, whence it sometimes propagates itself to the phalangeal articulations. It is in this species of whitlow that we most frequently see collections of matter form in the hand, fore-arm, and other parts of the upper extremity. The fourth species is an inflammation of the periosteum, in which the phalanges are often stricken with necrosis, and the finger lost for all useful purposes. The second and third species of whitlow are often combined—or the second spreads and causes the third. It is not, therefore, an easy task always to discriminate between them. The advocates, says M. Roux, of early incisions tell us that these incisions, when freely made into the second species of panaris, will prevent the

* Dictionnaire de Médecine, Vol. XVI. p. 136. 1828.

extension of the inflammation to the sheaths of the muscles. This, M. Roux observes, is contrary to the most positive facts—"contre ce que demontrent chaque jour les faits les plus positifs." In the second, or phlegmonous species, he says, the presence of matter is sometimes difficult to be ascertained—and, in the third species, it requires all the discrimination and tactus eruditus of the surgeon to recognise the stage of suppuration. This eminent surgeon maintains that it is of the greatest consequence to distinguish between the stage of inflammation and that of suppuration, as the treatment ought to be totally different. In the first or inflammatory stage, he recommends the most energetic local antiphlogistics. At the very commencement of deep-seated whitlow, he has found the greatest advantage from the application of numerous leeches, not to the immediate seat of the inflammation, but around the root of the finger. After these local bleedings, repeated according to circumstances, he employs emollient fomentations and poultices, mixed with opium which give great relief from pain.

M. Roux next discusses the question of early incisions. He acknowledges that he has the majority of his surgical brethren against him—that the anatomy of the parts inflamed in whitlow gives a most specious plausibility to the doctrine of his antagonists—but facts are, nevertheless, opposed to theory. "*La theorie parait ici des plus satisfaisantes ; et cependant les faits pratiques, ecueil de toute explication hypothetique et hasardée, demontrent tous les jours les heureux effets des incisions prématurées.*" The following are the results of M. Roux's observations and experience.

"An incision made before the formation of matter appears to diminish the pain and weaken the intensity of the whitlow, when the inflammation is confined to the sub-cutaneous cellular tissue ; but in this species of panaris the pain is never very urgent, and therefore requires not the use of these incisions. But are we to make these incisions, as many advise, to prevent the extension of inflammation to the tendinous sheaths beneath ? This measure has never appeared to me to attain the object in view. I have invariably seen, notwithstanding the section of the skin and subcutaneous tissue,

the pain and other symptoms persist—the suppuration become established in the sheaths of the tendons ; while other and numerous facts have convinced me that the inflammation of phlegmonous whitlow does not spread to the said sheaths, except where the incisions have been made. In this species, (phlegmonous,) should we penetrate the sheaths of the tendons, or carry our incisions down to the bone, as many of our *patricians* advise ? The surgeon will probably feel regret at having mistaken (a thing very easily done) a subcutaneous inflammation for inflammation of the tendinous sheath, and thus unnecessarily laid bare the tendons of the finger. I have no hesitation, therefore, in rejecting entirely these early incisions, as most frequently useless, and sometimes dangerous."

In the second, or suppurative stage, M. Roux is an advocate for a free opening, carried to the seat of the suppuration, whether deep or superficial.

We have thus set the sentiments of two authorities, Dr. Craigie and M. Roux, before our readers, leaving it for them to determine which they are to take for their guide. It is sufficiently evident that Dr. Craigie's treatment, by early incisions, is not only old, but the general practice of the surgical world—at the present time. M. Roux, therefore, has the more difficult task—that of persuading surgeons to change their adopted plans, while Dr. Craigie's labour seems almost a work of supererogation—being the recommendation of that which is already general.

28. HYDROCELE CURED BY "ASTRINGENT APPLICATIONS."

In the *Révue Médicale* for February, M. Mannoury has made some observations upon Hydrocele, and detailed a case successfully treated without an operation.

M. M.—, æt. 62, of good constitution, found the left side of his scrotum gradually increasing in size for three or four years, at the end of which time he applied to our author, who readily recognized a common hydrocele. Six months afterwards, the tumour was as large as one's fist, and as the patient had not sufficient resolution to submit to an

operation, he was directed to macerate a quantity of oak-bark in some forge-water, to add a little vinegar, and employ the whole as a lotion to the scrotum twice a day. It was continued during the Summer, and at the expiration of a year, when M. Mannoury saw the patient, the hydrocele had entirely disappeared, and nothing but a slight enlargement of the testicle remained.

This mode of treatment is applicable only to small collections of fluid in the tunica vaginalis, but we think it is worthy a trial in weakly patients, and especially old persons, who sometimes have not courage to undergo the operation, or stamina afterwards to support its effects. We remember, not very long ago, seeing the water evacuated by means of the caustic potash; a severe attack of erysipelas followed, which put the old man's life in considerable jeopardy; indeed, if we are not mistaken, proved fatal. Of course, where the patient is occupied, as in business; or, in fact, wherever the common operation is advisable, this plan of treatment is inadmissible, because it is both tedious and uncertain.

29. CASE OF EXTREME DIFFICULTY OF BREATHING CURED BY THE HYDROCYANIC ACID. By MICHAEL RYAN, M.D.

[Dublin Transactions, Vol. V.]

A young married woman, aged 23 years, and nursing at the time, retired to rest in perfect health, on the night of the 25th September. She had occasion, in the course of the night, to get up, and expose herself to the chilling influence of the night air at the door. She was almost immediately seized with pain in the chest, and extreme difficulty of breathing threatening suffocation. Early next morning she was bled to eight ounces, without relief. At 2 p. m. our author found her sitting in bed, breathing most laboriously—the inspirations long—expirations short—face pale—lips livid—features relaxed—eyes glassy—no pulse at the wrist—action of the heart feeble and indistinct—hands and feet covered with a clammy perspiration.

As it was evident that the lancet could not be used, on account of the state of the circulation, and as it appeared pro-

bable that she would die before a blister could rise, Dr. R. determined to try the prussic acid, having repeatedly found it the most efficacious remedy in relieving difficult respiration and oppressed circulation.

“Accordingly six minims of the acid, as prepared by Scheele, were mixed in two ounces of distilled water, with one drachm of compound spirit of lavender. Of this mixture she was to take half an ounce every ten minutes, until her breathing was in some manner affected. I also directed that if any relief were obtained by the first, second, or third dose, the medicine should not be repeated oftener than every half hour, and that it should be discontinued altogether, and the administration of a little brandy substituted if sudden weakness, headach, or fainting should supervene.

“So hopeless was this case, in my opinion, that I thought it most probable that the woman would be dead before the medicine could be administered.

“Four o'clock, p. m. The medicine has been taken as directed; the breathing is much easier, and the patient is altogether wonderfully relieved. She complains of some debility. Six o'clock, p. m. Is not so well as at last report; complains much more of weakness. Let her have some brandy in small quantities during the next hour. Seven o'clock, p. m. Pulse very weak, small, and frequent. Says she experienced the greatest relief from the mixture, which is all taken; but the shortness of the breathing has been increasing for the last two hours, and is now as violent as at two o'clock, p. m. Her countenance expresses extreme anxiety. On the whole her case seems perfectly hopeless. Let her have eight minims of the acid with two grains of tartar emetic in two ounces of distilled water, half an ounce to be taken every ten minutes as above directed.”

By the time she had taken four doses of the mixture, considerable ease was obtained—and after the last dose she fell into a sleep, from which she awoke free from all alarming symptoms. The mixture acted on her stomach and bowels. In this case 14 drops of hydrocyanic acid were exhibited in the space of eight hours. The acid was obtained from Messrs. Stanley, and Co., and was prepared according to the formula of Scheele.

The Doctor remarks that this remedy is extremely dangerous, and requires the closest observation of the practitioner. The most powerful stimulants should be immediately had recourse to, when its deleterious effects on the constitution are perceptible.

30. BILIARY SECRETION.

Mr. Abernethy, in his 35th Lecture takes up some pages with the consideration of biliary secretion. He says, "the function of the liver is a strange thing—it is what does not take place in any other part of the body." We do not see any thing very strange in this, as there are no livers in "any other part of the body." But the strangeness to which he alludes is the secretion by a *vein*. But is there nothing particular in the *vena portæ*? It is like no other vein. All other vessels of this kind arise from the terminations of arteries—progressively enlarge—and end in the heart. This is not the case with the *vena portæ*. It arises from the terminations of arteries, it is true; but it does not progressively enlarge, and end in the heart by a large trunk or trunks. No. After its branches have enlarged, and formed one great trunk, this trunk splits into a great many branches which progressively decrease in calibre, and end by innumerable capillaries in a gland. Where, then, is the analogy between the *vena portæ* and other veins? From the moment that this vessel begins to subdivide and push its innumerable ramifications into the substance of the liver, it assumes the great anatomical character of an artery—progressive decrease of calibre. Where is the wonder, then, that it should take on the function of an artery? If the *cavæ hepaticæ* indeed, which show the venous character in shape and structure, were to secrete bile, we should say it was "a strange thing."

Mr. A. clings to the glory of a discovery in having found a *lusus naturæ*, where the *vena portæ* terminated in the inferior *cavæ*—where the *hepatic artery* was one third larger than common—where the gall-bladder was one third smaller than usual—where there was some little, *very little* bile found in it—and, in short, where the child had lived a year after birth, in all

this, we cannot see any thing to "completely quash" the ancient and the modern opinion that there is something peculiar in the *vena portæ*, as compared with other veins, for the purpose of biliary secretion. It is but rarely that a *lusus naturæ* proves any thing in physiology. Nature had here enlarged the hepatic artery, in order to carry blood to the liver in place of the *vena portæ*—but, in all fairness, this does not prove that the *latter* vessel is not more proper for biliary secretion than the *former*. A great deal too much importance has been attached to this *lusus*, both by Mr. Abernethy and others, who do not appear to have taken into consideration the anatomical difference between this vein and the other veins in the body. For our own parts, we are not ashamed to subscribe to the old opinion, that the *vena portæ* is the vessel that supplies the pabulum of the biliary secretion in the liver—and that the hepatic artery (in all cases except the *lusus naturæ* in question) is the nutrient vessel of the organ.

31. DISSECTION WOUND—DEEP INCISIONS.

Dr. Evans has recently published a case which occurred in the Malin Dispensary, and where the practice of deep incisions appears to have been attended with most beneficial consequences.

The patient, Mr. Layrd, a surgeon, while opening an abscess in the scrotum of a man, whose urethra had sloughed, received some morbid matter in consequence of being scratched with the point of a pin. Acute pain was immediately felt—and in the same evening a train of severe complaints, now too well known to need detail, commenced. The patient's sufferings are said to be indescribable by language. The pain and burning sensation were confined at first to one spot—where the pin had entered. He ran from place to place, unable to support the torment. He scarified the part—applied caustic—put the hand in hot water, but with aggravation of his sufferings. Cold and other applications were equally inefficacious. Next morning, a crucial incision was made over the thumb, and he was bled to 16 ounces,

when he became faint. Calomel and salts produced free evacuations. Dr. Evans saw the patient 36 hours after the reception of the poison. He was tossing to and fro—face flushed—was gnashing his teeth—beating the bed with his feet—and crying out on account of the fiery sensation in the thumb, which was red and swelled. The lymphatics were visible, running up the arm to near the axilla. He was now obliged to keep his hand constantly in cold water often renewed. Three large leeches were applied to the wounded part, as also belladonna and hyosciamus in watery solution. "On the sound skin, above the termination of the inflamed lymphatics, an eschar was formed circularly, by pencilling the part with lunar caustic." Five grains of Dover's powder and one of quinine every second hour. On the third day, gentle pressure caused a discharge of dark fluid blood from the part. The pain, &c. were unabated. The part was freely incised till the scalpel reached the bone. Rollers were firmly applied to the thumb, hand, and arm, with decided relief. These were moistened with narcotic solutions. Leeches having been procured from a distance, the rollers were taken off, and 22 of these animals were applied over the head (hand no doubt) and fore-arm. No relief followed. More incisions were made, and dark grumous blood continued to ooze out. The pain, swelling, and inflammation continued to spread. On the 5th day, the constitutional symptoms being severe, and the arm swelled, a five-inch incision was made, and the tense fascia freely divided. Opiates, quinine, wine, and other remedies, were employed. Great ease immediately followed this incision; but the pain now invaded the fore-finger—and a deep incision here produced quick relief. His countenance looked haggard—features sharp—is restless and peevish—urine pale and passed in large quantities. He took animal food and drank freely. Some curious nervous symptoms now showed themselves. In a consultation, it was determined to pursue the plan of incisions according to circumstances. Nourishment, wine, laudanum in pretty full doses. Several more incisions were made; but still, on the 9th day, we find "every symptom aggravated," and "he appears rapidly sinking, as well from disease as from diarrhoea." The superacetate of lead and opium pre-

scribed. On the 10th and 11th days, the arm was frightful—phlyctenæ scattered over it. He took a bottle of Madeira and some malt liquor, with quinine, &c. daily. On the 12th day, the inflammation covered the shoulder—the diarrhoea had ceased—the quinine was given in doses of two grains every two hours. He takes two bottles of wine, besides malt liquor in the 24 hours—refuses medicine. On the 18th day, the arm was the size of a pillow, and fluctuation was evident throughout this extremity. From an incision near the origin of the supinator radii longus, a large quantity of healthy pus flowed out. Some other incisions were made, and the greatest relief was the consequence. Matter, on the 19th day, was evident on the side of the chest, and was discharged by an incision. From this time, the unfortunate patient gradually improved—and, on the 55th day, he was able to crawl out of doors for a few minutes. In the following sentiment we entirely agree—indeed it is the doctrine which we have always maintained.

"It is superfluous to refer to the many valuable cases published on similar affections. That now detailed justifies the opinion that neither any bad habit of body, or unwholesome condition of atmosphere, or the injury itself, could have availed any thing in inducing a disease so severe; and that all was caused by the minutest portion of an animal poison entering the system, and this poison generated during the life of the individual who communicated it. Similar occurrences do not often happen. Let the nature of the poison be what it may, it derived its virulence from extravasated urine, causing gangrene of the parts in contact with it, and involving extensively the cellular membrane. That the person imparting this poison was free from any disease till attacked with the retention of urine, may be inferred from his general healthy condition and his country life."*

We agree also with the able author, that venesection and other depletive measures had little or no good effect in this case. How can it be expected that they should? A poison is received—the nervous system is irritated—the fluids are

* Ed. Journal for April, 1828, p. 267.

contaminated—and depletion can only go to the relief—(a precarious relief)—of some of the inflammatory affections set up. The constitution must be supported till it can overcome the effects of the poison. The local incisions—even anterior to suppuration—were, no doubt, of great benefit.

32. STATE OF THE PERSPIRATION IN ACUTE RHEUMATISM.

Dr. Chambers' practice in this disease is already known to our readers, from some notice which we took of cases published in our cotemporary, the Medical and Physical Journal. The same distinguished physician has lately detailed two cases in the MEDICAL GAZETTE, which were quickly cured by ten grains of calomel with two of opium at night, and a black draught in the morning. This process was preceded by one small bleeding. In the second case, a young man had acute rheumatism of the fibrous structures about the hands, wrists, fore-arms, &c. shifting its seat frequently, and attended with "*profuse acid perspiration*." The pulse was 120—palpitation of the heart—pain in the cardiac region much aggravated by motion or any excitement. He was bled and put on the above plan. The pain continuing about the heart, he was bled a second time, and on the fifth day his mouth was sore from the calomel. The symptoms were diminished, though not removed. The calomel and opium, in smaller doses, were continued. A return of the palpitation required another bleeding, succeeded by a blister, when the disease yielded.

We have noticed this case, in order to draw the attention of our readers to the sensible properties of the perspiration in acute rheumatism. Dr. Chambers incidentally notices the acid quality of the cutaneous discharge in this case, and we should be glad to learn whether he has generally noticed such chemical property in rheumatic perspiration. We were lately informed by a medical gentleman, (Mr. Wigan,) that he has almost invariably ascertained the acidity of sweat issuing from the bodies of patients labouring under this disease. He employs alkalies very freely in acute rheumatism, and, he says, with decided benefit. He was led

to this practice from finding a popular remedy for the disease, to consist principally of solution of the ashes of certain plants. We think we have seen the remark before, respecting this acidity of the sweat in rheumatism—and certainly we have often remarked the sour smell emitted from the patient's body; but we think it would be worth while to test the fluid in these cases, in order to put the matter beyond dispute.

33. FRACTURE OF THE TROCHANTERS, FOLLOWED BY TETANUS.

In a weekly Journal, there is rather an extraordinary case related by Scotus, and certainly, if the particulars be correct, there is culpability attachable somewhere. It appears that an old man fell in the street, and was admitted, some days afterwards, into the Royal Infirmary, with the limb shortened "certainly two inches; the toes inverted, and the knee drawn above and across that of the opposite side." There was, at the same time, mobility of the limb, and from this circumstance it was determined, in consultation, that the case was not one of luxation, but fracture through the trochanters, and the long splint ordered accordingly. The patient seems, however, to have fallen into bad hands, for the reporter tells us that "the skin was completely torn off the instep by the process of extension," and there was produced, to boot, "a gash of an inch in depth, extending across the lower edge of the gluteus muscle, round into the groin!" Chronic tetanus came on, and was somewhat relieved by stimulants and a full diet, but the nates sloughed, and the patient sank. On dissection, there was found fracture of the trochanter major, kept together by the "thickened capsular membrane," with a considerable ossific deposit around the neck of the femur, and some absorption of the cartilage of the head of the bone.

This account of the dissection, and the statement respecting the *inversion* of the limb, are taken from Dr. Hunter's clinical lecture on the case; but Scotus asserts, that the limb, on removing the bandages, was *everted*, and the neck of the femur almost entirely removed by

interstitial absorption. With such contradictory statements before one, it is exceedingly difficult to know what to say to them; but it seems to us, that that peculiar affection of the neck of the femur, viz. an interstitial absorption, which we meet with in old persons, had taken place, or was taking place, here, prior to the occurrence of the fracture across the trochanter. SCORUS makes some remarks upon the application of the long splint, the drift of which, as far as we can comprehend them, is to condemn its application. We must say, however, that from what we have seen, the long splint is of very great service indeed in fractures of the thigh, and we should be induced to prefer it, in the generality of cases, to the double inclined plane, or any other method. The manner in which it was applied in this particular case we do not mean to defend; in fact, we must say, that the dresser whose bandages can produce gashes *an inch in depth*, from the gluteus muscle to the groin, deserves to have a few "gashes" inflicted on his own gluteus by the cat o'nine tails. We are not to be understood as making any reflections upon the surgeon, Dr. HUNTER; for we dare say the statements of SCORUS are a little touched up and coloured, as has occasionally happened with the productions of his brother reporters on this side the Tweed.*

34. MR. GAITSKELL'S OBSTETRICAL BANDAGE, OR BANDAGE OF SUPPORT.

This bandage is applicable to four different periods of parturition.

1st. *The Eighth Month of Pregnancy.* At this period, the abdomen is often pendulous, particularly in fat women, and those who have borne many children. The over-stretching of the abdominal muscles destroys their tone, and lessens the elasticity of the integuments, which produce pain in the lumbar region, and many uncomfortable feelings. These are greatly relieved by the application of the bandage, which should be placed under the linen, and tied in the middle of the loins.

2dly. *At the Commencement of Labour.* In this instance, the bandage should be applied exterior to the clothes, and tied on the right side of the abdomen, the patient lying on her left. It will be applied with more facility in the erect position of the trunk.

The pressure must be regulated by the feelings of the patient, as the integuments and fascia are in some cases exquisitely tender.

When the membranes are broken, and the waters discharged, the second row of tapes must be tied; by these means, the parieties of the abdomen are brought into contact with the enlarged uterus, which, embracing it, furnishes several additional points of support; this enables that organ to act with more energy in propelling and expelling the fœtus.

3dly. *After the Fœtus is expelled.* The third row of tapes must now be employed to lessen the abdominal cavity, and compress the uterus. At this period it is most essentially useful, by facilitating the action of the uterus in detaching and expelling the placenta.

4thly. *After the Expulsion of the Placenta.* Many a woman, after an easy labour, and early expulsion of the placenta, is subject to an atonic state of the uterus, followed by internal flooding and death, though there is no external appearance of hæmorrhage.

"In this way I know five instances of sudden death, the os tincæ closely contracted and the cavity of the uterus full of fluid and coagulated blood, and was not suspected till discovered by post-mortem examination. The proper application of the bandage completely prevents this afflicting misfortune.

"Another good effect is that of restoring the energy of the abdominal muscles and improving the shape.

"In illustration of the dangers pending on those females who are so unfortunate as to be delivered without a supporting-bandage, I subjoin a few cases."

A lady, aged thirty, of a delicate constitution, was brought to bed of a fine healthy child; had an easy labour and the placenta followed in about 15 minutes, with no more than the usual discharge. As the patient felt a little refreshed, the accoucheur went down to his breakfast, and scarcely begun, when

* Dr. Ballingall's account of the case will be seen a little farther on in this Number.—Ed.

the nurse ran down, and, in a flurry, stated her mistress was fainting; the accoucheur immediately visited his patient, and found her as described by the nurse, the face and skin pallid—the extremities cold—the pulse feeble, quick, and scarcely perceptible, while the abdomen was greatly enlarged. On examining the napkins, he found them unsoiled, and, on examining the vagina, the os tincæ was found closely contracted; upon pressing it with the finger, it produced pain, when much fluid and coagulated blood were expelled. He now thought it necessary to dilate the os tincæ, introduce the hand, and empty the uterus of its contents; and at the same time to give support, by pinning a napkin tight round the waist. By these means, the uterine contraction was completed, the hemorrhage stopped, and the patient finally, but with great difficulty, recovered.

The quantity of blood lost on this occasion, was calculated at more than two quarts.

A similar case occurred to the same gentleman a few years after, which induced him to employ a table-napkin as a bandage of support, on the completion of delivery; since which, in 40 years' extensive practice, he had the good fortune to meet with no more such distressing occurrences.

Case 2. A lady in this parish was delivered by a female midwife:—The labour was fair and easy, and every thing went on to her wishes; the midwife left her without pressing on the abdomen, or putting on a bandage, while she dedicated her time to the child. A few minutes after this, her patient grew faint, turned pale, and quickly expired. There was no external hemorrhage.

On the post-mortem examination, the uterus was found filled with fluid and coagulated blood, and extended to the scrobiculus cordis.

“The remarks I have to offer on these cases are, the necessity of compression of the abdomen immediately after the expulsion of the placenta, the examination of the pulse and countenance, and not too hasty a departure of the practitioner, are incumbent duties, and necessary to the safety of the patient.

“In all those who have been rescued, it has been accomplished by the prompt

introduction of the hand into the cavity of the uterus for the discharge of its contents, aided by external compression, and the mechanical stimulus of the hand, bringing on its proper contraction. Should these fail, there is only one more resource, the transfusion of human blood, recommended by my friend Dr. Blundell.

“Both Dr. Blundell and Dr. Conquest have seen the bandage, and speak highly in favor of its utility.”

We are informed by Mr. Gaitskell, whose experience has been almost unlimited, that, out of 7000 cases of midwifery, occurring in his practice during the last 45 years, he cannot recollect a single instance of fatal uterine hemorrhage. Before he constructed this bandage, he was in the constant habit of employing a small table-napkin. But the bandage in question is more extensive in its application, while it is extremely simple; as it is applied at the very commencement of labour, and follows it through all its different stages.

N. B. The bandage is made by a poor deformed young woman, (Miss Grierson, No. 6, Bedford Place, Deptford Lower Road) and costs but four shillings. It will last a female for life.

P. S. Mr. G. forgot to mention that, before the bandage is put on, after parturition, its utility would be increased, if a small pillow were placed on the abdomen previously to drawing the tapes.

35. IPECACUAN EMETICS IN MÆNORRHÆGIA.

Dr. Osborne (Assistant Physician to Sir Patrick Dun's Hospital) has published a short paper on this subject in the recent volume of the Transactions of the Association. Although Denman hints at the exhibition of nauseating doses of ipecacuan, in hemorrhage after abortion; yet M. Caffin appears to have been the first who describes cases in which emetics of ipecacuan were followed by the immediate cessation of the discharge. In the Institution for the Suppression of Menstricity in Dublin, in which there are, on an average, above 1200 women, there is a Dispensary, but no Hospital. Mænorrhage is of frequent occurrence among these paupers.

"I began the use of Ipecacuan by ordering a scruple to be taken as an emetic at night, and I generally directed an acidulous saline purgative to be administered the following morning. The effect produced exceeded my most sanguine expectations. The discharge either ceased within twenty-four hours, or was so much diminished that no more remedies were necessary to insure its entire removal. In some few cases it recurred within a short time, but when this did happen, it was only necessary to repeat the emetic once or twice in order to produce a permanent effect. I met with a few individuals in whom the discharge continued with little alteration after the first emetic, but with these I had only to repeat the remedy on the following night; and in one case alone three emetics were taken before the desired effect was produced."

Five cases, from the books of Sir P. Dun's Hospital, are related merely by way of illustration and authentic proof of the practice.

36. CASES OF ERYSIPELAS PHLEGMONODES.

[Mr. Plymsoil—Glasgow Royal Infirmary.]

Case 1. George Ross, æt. 33, hinger-maker, was admitted into the Infirmary, October 31st, 1827, under the care of Dr. Anderson. The skin has sloughed from right arm through its whole extent from shoulders to extremities of fingers, with the exception of a stripe about an inch in breadth on its anterior and inner surface, and a small portion on internal surface of wrist and fore-arm. The raw surface looks clean, and the granulations are red and healthy. On the back of the hand the tendons are exposed, but are becoming covered with granulations. The fingers are in the bent position. Five weeks ago, without evident cause, he observed some redness and swelling over back of hand, which gradually extended up arm. He was delirious for some time—arm was first poulticed, and about eight days after its commencement, a puncture was made about middle of arm and a large quantity of matter evacuated—it was afterwards covered with flour—

has been taking from six to eight ounces of wine daily for the last three weeks—health impaired, but he has been improving within the last eight days—pulse 100—tongue whitish—bowels regular—perspires during the night—has slight cough—ordered to have eight ounces of wine daily—the arm was enveloped in cotton. 11th, Cotton to-day removed—granulations healthy, and some formation of new skin at edges—to have bark. 14th, Has had a feverish attack with acute pain of right side—pulse 120, full—skin moist—tongue furred—dressings to be removed and a poultice applied—bled to 25 ounces—a blister was afterwards applied to the affected side. 15th, Pain of side relieved—bowels free and skin moist, from salts and antimonial mixture. 16th, Has had a good night, but pulse to day very rapid, and pain has removed to the left side, though not acute—tongue dry and furred—one loose stool last night—respiration easy, and he expectorates copiously—sore discharges healthy pus. 17th, Has had another easy night, and complains of little pain even on full respiration but pulse not improved, being still rapid and rather weaker—countenance more sunk and sore does not discharge so freely—ægophony is distinctly perceived on right side of chest posteriorly—digitalis was exhibited for some time, but without effect—hiccup supervened—dyspnœa and general prostration increased, and he gradually sunk from this period—he died on the 29th. Inspection. Right pleura bore strong marks of previous inflammation—its folds adhered at the anterior superior parts—posteriorly they were covered by small membranes, and contained between them about six ounces of sero-purulent fluid. The part of the lung corresponding to the situation of the effusion was hepatized, and presented an appearance exactly resembling granite—almost the whole of the superior, and middle lobes was in this state—left lung natural in appearance, excepting that there was some coagulable lymph round the larger vessels forming the root of the lung—other viscera sound.

Case 2nd. Thomas Jack, æt. 42, sergeant of police, was admitted December 1st, 1827, under the care of Dr. Cooper. Left leg and foot are greatly swollen, and of a dull red colour somewhat tense at inferior part of inside of calf, and about foot and about third of leg has a boggy

feel on pressure—a patch of integuments along outside of dorsum of foot and around outer anole 10 inches long and four broad, have sloughed, leaving a sore covered by dead cellular membrane of a yellowish colour, and edges are extensively undermined—on back of leg there are several broken vesicles discharging a serous fluid—limb is the seat of severe burning pain—has been confined to bed since disease began and strength is much reduced—pulse 120 small—tongue brown and arid—skin warm and dry—thirst. Bowels open from medicine—some delirium at night. About ten days since fell down a few steps of stairs, and thinks he sprained tarsus—severe pain succeeded on dorsum of foot and the day following he had frequent rigors, and some redness appeared on foot—leeches were applied, but symptoms increased rapidly, and integuments on dorsum of foot which had vesicated, sloughed six days ago—applied emollient and fomenting poultices—and three days since three superficial scarifications were made along lower half of leg. An incision three inches long is now made through the common integuments on inside of calf of leg—sores and wounds dressed with lint dipped in oil. camph: and a bandage lightly applied from toes to knee, which is to be kept moist by a lotion of lime-water and spirits—to have at night 40 drops of laudanum with half a drachm of antimonial wine—to have four ounces of wine daily. 2nd, Slept well last night—pulse of better strength—says he feels easier than for several days past—cont. al. 4th, Continues to improve—tongue cleaning—slough on foot separating, with free discharge of healthy pus—swelling of leg much diminished. 8th, The whole slough separated, leaving a tolerably healthy sore—inflammation of leg nearly gone—appetite good—pulse 72. 12th, Continues to improve. 14th, bowels have been slightly disordered since last report, for which he has had calomel and an anodyne enema. 16th, Bowels regular—sore to be strapped and bandaged—cotton has been since applied—sore cicatrizing fast—health good.

Observations.

The medical profession are at present much divided with regard to the treat-

ment of erysipelas phlegmonodes, some practitioners have recommended the practice of making incisions through the affected structures, together with a strict observance of the antiphlogistic treatment, whilst others have reprobated this practice and recommended another, which is diametrically opposite; the exhibition of tonics and stimulants, and have substituted for incisions, the application of leeches and poultices. These different opinions have been equally supported by the highest authorities, and, constituting the leading controversy of the day, have excited an extraordinary degree of interest. The method of treatment which has been adopted in this infirmary, is a modification of both. Incisions have been practised at every stage of the disease. At the commencement of the disease, mercurial purgatives and antimonials have been administered, but when the disease has become fully developed it is characterized by extreme depression, and consequently the exhibition of tonics and stimulants have constituted the general treatment. The practice of making incisions in erysipelas phlegmonodes has been established in this infirmary for the last four or five years, and has invariably proved successful—long incisions are generally preferred. I have had an opportunity of late, however, of witnessing the comparative effects of both methods of treatment (the *practice* and *omission* of incisions) in the cases which have been reported above. I have, therefore, considered it incumbent on me to communicate the result of my observations. These cases are obviously of great importance, as it is only by a comparative observation of the different methods of treatment, that we can determine which is the most advantageous. In reviewing these cases, the evidence is decidedly in favour of incisions. The case of Jack is decisive of this practice. Jack was admitted with symptoms indicating a high degree of irritative fever. An incision was made into the affected limb, through the skin and cellular membrane, immediate relief was experienced—the constitutional symptoms were all immediately mitigated, and he recovered with great rapidity. The cure in this case was unquestionably to be attributed to the incision, as there were no accessory measures employed at the same time that

could influence the result, and consequently the efficacy of the measure could not be involved in any doubt. The case of Ross when contrasted with that of Jack, strongly enforces the necessity of this practice. The measures which were employed in this case, were altogether inadequate to arrest the progress of the disease—the disease advanced with great rapidity—the integuments of the arm sloughed—extensive suppuration succeeded—and he died ultimately of inflammation of the lungs. Incisions were of course quite out of the question when this man was admitted into the Infirmary, the whole of the integuments having previously sloughed away. I am convinced that this man's life would have been saved, had incisions been made at an early period of the disease.

Inflammations of the lungs and investment of membranes are almost invariably consequent on large surgical operations and extensive wounds. These affections are exceedingly insidious, and the ordinary symptoms so fallacious, that they are completely overlooked, until either from the disease having extended so far, or the exhausted state of the patient forbidding active measures, they become quite uncontrollable, and terminate fatally. I am convinced that stethoscopic examinations would have the effect of obviating, either in a great measure or altogether, these fatal terminations—and I consider it highly incumbent on those gentlemen whose prerogative it is to officiate as hospital surgeons, and have such excellent opportunities for acquiring a thorough knowledge of stethoscopic indications, to make use of the stethoscope in such cases.

This man having died of inflammation of the lungs therefore, does not militate against the inference which has been drawn from this case, as it was obviously a disease consequent on the extensive suppuration from the affected arm. It may be questioned, in a critical examination of this case, whether the local disease might not have been arrested by the application of leeches to the affected part, and whether the event of this case might not have been different had the general abstraction of blood been persevered in, as there was a decided mitigation of symptoms after the first bleeding. I have no doubt of the efficacy of leeches

as auxiliaries. I am convinced, however, by the evidence of analogy, that they are incapable (excepting in very mild cases) of subduing the disease. This has been exemplified in the case of Jack—this case also shows the inefficiency of mere scarifications, when both the skin and cellular membrane are involved in the disease—with regard to bleeding being persisted in, the exhaustion in this case was so great as to render it impracticable. Incisions operate beneficially by relieving tension and the local abstraction of blood, chiefly, however, by relieving tension. We should not, therefore, be deterred from making incisions in cachectic or debilitated individuals from a fear of producing an augmented state of debility, by the loss of blood occasioned by an incision; the bleeding may be in a great measure suppressed, (whilst the principal object, the relief of tension, is attained) or advantageously compensated for, by the exhibition of bark and wine, as these measures are not incompatible with each other.

37. MANIA FROM SOBRIETY.

There is danger in all sudden changes of long-continued habits, even from intemperance to sobriety, as the following fact proves.

A man who was much given to drunkenness, committed a theft, and was cast into prison, where, of course, he had low diet, and only water to drink. After the first week of his incarceration, he began to evince some symptoms of disturbed intellect, after which he quickly lost flesh, became sleepless, debilitated, and ultimately delirious. In short, mental derangement was unequivocally manifested, and he was tormented with horrible images before his eyes. Dr. Hansbrandt, after examining into the complaint, and the previous habits of the individual, ordered him a moderate quantity of brandy twice daily. The good effects were soon evident. The cerebral disturbance subsided, and he regained his flesh and strength.—*Russ's Magazine*, T. 21.

The above is a species of delirium tremens not uncommon among those who make sudden changes from full living and stimulating drinks to low diet and watery beverages.

**38. ON THE USE OF NITRATE OF SILVER
IN CERTAIN AFFECTIONS OF THE EYE.**
By ISAAC RYALL, Esq. Surgeon-Oculist
to the National Institution, &c.

[Dublin Transactions, Vol. V.]

In a former number of this Journal, we introduced the substance of a paper by the same Author, on the purulent ophthalmia of infants; and as we know Mr. Ryall to be a purely practical man, who has had wide experience in ophthalmic surgery, we have much pleasure in again introducing him on the tapis.

The nitrate of silver has been found so beneficial in many diseases of the eye and its appendages, that, as might have been expected, its application has become empirical and indiscriminate. It is, therefore, desirable that we should know, from scientific experience, what are those conditions of the organ to which this remedy is peculiarly applicable.

1. *Ulcer of the Cornea.*—This is a very common termination of ophthalmia—a complaint remarkably prevalent among the poor in Dublin, where it assumes a worse character than in any other part of the United Kingdom.

“The cornea, after protracted, and sometimes after comparatively mild inflammation of the conjunctiva, is frequently occupied by an infinite number of small superficial ulcers, appearing as mere depressions or losses of substance in the investing tunic. These, though so minute as to require the closest inspection, and even the aid of glasses for their detection, yet are productive of no small share of irritation and inconvenience. Hence this irritation is sometimes ascribed to primary inflammation, and ineffectual, if not injurious, means of relief resorted to. I have not unfrequently known patients of weakly strumous habits to have been condemned to long confinement in darkened apartments, to a strict antiphlogistic regimen, and even to the influence of mercury, whose miseries might have been, in a great measure, curtailed, had the precise nature of their complaint been timely discovered, and the nitrate of silver applied.”

For the superficial ulcer, a solution, containing two grains of the nitrate to the ounce of distilled water, generally answers—if the ulcers are obstinate, the

solution may be made stronger, and conveyed to the parts by way of injection. When the ulcers deeply penetrate the laminae of the cornea, the remedy is still more imperiously demanded, else the organ will be destroyed. In addition to the solution, the caustic itself, or a saturated solution should be applied to the ulcers. A little oil of sweet almonds ought to be dropped into the eye after the nitrate is used. This process is to be repeated on each separation of the eschar, and continued till the ulcer assumes a more healthy aspect, and becomes less painful. The escharotic is then to be laid aside, and the weak solution applied. Mercury has been considered as great a specific in this complaint as in syphilis; but the habits and constitutions of those who are generally the subjects of the former, render mercury, to any extent, inadmissible.

“There is, however, a contra-indication of this remedy under the circumstances of redundancy of lymph, or of interlaminary ulceration or effusion, when the object is, by means of local blood-letting, purgatives, and emollient fomentations, to diminish the vascular action of the part. If considerable pain and inflammation be present, the nitrate of silver must either be accompanied by, or give place to, according to the violence of these symptoms, the means just mentioned; and, if no constitutional taint forbid, a pill composed of calomel, antimony, and opium, should be administered twice a day, until the mouth be slightly affected, or the symptoms recede. It has been the practice in ulceration of the cornea, to drop into the eye a little of the vinous tincture of opium twice or thrice a day; but this is known greatly to aggravate the irritation, without in any degree contributing to produce healthy action of the parts.”

If no constitutional symptoms forbid, some calomel, antimony, and opium should be administered twice a day, until the mouth becomes slightly affected. The introduction of vinum opii is reprobated by our author.

2. *Pustules.*—These appear in the form of one or more little eminences, either on the sclerotica or cornea—but most frequently at the junction of these two tunics, where, as they advance to suppu-

ration, they bear no small resemblance to little pearls set round the edges of the cornea. This form of ophthalmia is the concomitant of a scrofulous taint. Where the inflammation runs high, leeches and purgatives should be employed; but the ulcerative process of the pustules will be best restrained by a few light touches of the stronger solution of the nitrate.

3. *Slough of the Cornea.* As an external remedy for this dangerous affection, "there is none so grateful, or with also efficacious for throwing off the morbid parts, as a solution of the nitrate of silver, in the proportion of eight grains to the ounce of water, briskly injected against the sloughs, three or four times a day."

"But to obviate and arrest the progress of this serious termination of disease, we must rest our chief reliance on the extract of cinchona, so justly praised by the late Mr. Saunders. Opportunities are afforded to me but too frequently of giving this medicine a fair and full trial, in the cases of young infants born for the most part in the Lying-in-Hospital, and I assert that, greatly as I had been prepossessed in its favour, it far exceeded my expectation, since both shape and function were preserved to an extent I dared not to hope for, in several instances where death of the exterior laminæ of the cornea, or of a segment of its entire thickness, had already taken place, and when the eye had presented the appearance of a disorganized mass."

4. *Protrusion of the Iris.*—"In this case, the nitrate of silver is our chief, perhaps our only resource." The aqueous humour continues to be distilled through the aperture as fast as it is secreted, until the breach is filled up. The effects produced by a few applications of the pencil-pointed nitrate of silver, or the strong solution, are truly gratifying. Healthy action and new growth of parts are thereby quickly obtained—the cornea resumes its convexity—the protruded iris is retracted, and, unless the breach has taken place in the centre of the cornea, vision is completely restored.

5. *Nebulous Cornea.*—This, the result of chronic inflammation, consists in a thickening and increased vascularity of

the conjunctiva, and effusion between this membrane and the exterior lamina of the cornea, of albuminous fluid.

"The application of leeches to the inner surface of the lower palpebra, the exhibition of purgatives, and precaution against strong liquors and cold, are the first objects to be attended to. If granulations exist on the palpebræ, they are to be removed by the means hereafter to be mentioned under the head of "granular palpebræ". After the vessels shall have been well emptied by the daily application of two leeches to the conjunctiva of the lower eyelid, and a few purgatives have been administered, a circle, or as large a segment of one as will include the opaque portion of the cornea, is to be described with the pencil-pointed caustic on the sclerotic at about two lines distance from its junction with the cornea. After the eschar has sloughed off, ulceration is to be kept up for some time by the same means, care being taken to subdue any excessive inflammation which may be thus produced. The solution of the nitrate of silver, varying according to circumstances in the proportion of from two to six grains to the ounce, is to be frequently injected into the eye, and the ointment of the red oxyde of mercury applied every night to the tarsi, a portion of which may be allowed to be diffused over the surface of the eye-ball."

6. *Albugo.*—"In no case has the nitrate of silver been more abused than in the early stage of albugo, which consists in a deposition of coagulable lymph by the arteries, during the presence of ophthalmia, between the laminæ of the cornea."

"Absorption in this stage is more judiciously attempted by topical blood-letting, and alterative doses of calomel, antimony, and opium, than by local stimulants, whose premature use would be productive of increased vascular action and deposition. When, however, the former have been persisted in for some length of time, which the experience and observation of the surgeon can only determine, it will become necessary to have recourse to the latter, which should consist in a solution of from four to eight grains of the nitrate of silver to one ounce of distilled water, and in a weak ointment of the red oxyde of mercury ;

the former to be applied twice or thrice a day, and the latter every night with a camel-hair pencil to the speck.⁵

7. *Leucoma*.—That dense, pearl-coloured, inveterate opacity occupying a part or whole of the cornea, cannot be removed by any means with which we are acquainted.

8. *Staphyloma*.—Mr. R. affirms that, in many instances of those recent staphylomata of young children succeeding to small-pox and purulent ophthalmia, "the growth has been checked, and even the removal accomplished, by producing upon them, and keeping up, for a considerable length of time, artificial ulcers by means of the nitrate of silver."

9. *Granular Palpebræ*.—This is the consequence of long-continued inflammation, especially of the purulent form, producing irritation (by friction) and even opacity.

"The granulations may be shaven off with a scalpel or the shoulder of a lancet, and the abraded surface touched with a strong solution of the nitrate of silver; or, without any previous excision, the caustic may be applied, and repeated after each sloughing of the eschar, until the granulations have disappeared, care being taken, after each of these applications to wipe the parts with a sponge, and to drop into the eye some oil of sweet almonds."

10. *Ectropion*.—This morbid thickening of the conjunctiva may sometimes be removed by the nitrate—but when the surface is callous, it must be removed by the knife or scissors.

Finally, when it is necessary to remove encanthis, pterygium, and other fleshy excrescences by the knife, the subsequent aid of the nitrite of silver will be required, for their ultimate destruction, and for the encouragement of healthy granulations.

39. ARTIFICIAL ANUS IN THE VAGINA.

To cure the above-mentioned loathsome disease, an operation, equally desperate and unfortunate, has been recently per-

formed by M. Roux, at LA CHARITÉ. Had it happened on this side of the Channel, in the hands of one of the ELECT, we should have heard nothing of it:—But had a Cooper, a Travers, a Brodie, a Bell, a Keate, or, in short, any one, *not of the coterie*, performed the operation, the tocsin would have been sounded in every town and village between Dover and Stromness.

A young woman, after a hard labour, was found to discharge the fæces through the vagina. She was admitted into LA CHARITÉ under M. Roux, who discovered the artificial anus behind and towards the left side of the cervix uteri. It was proved that the perforation was not in the rectum or colon, for large injections, pushed up into the latter, came away per anum, and none by the artificial passage. It was, therefore, naturally conceived, that some portion of the ileum had descended there, and got nipped by the pressure of the child's head in parturition. The poor woman found her existence so wretched, under these circumstances, that she implored for an operation, no matter how hazardous, if it promised any chance of cure. All other means failing, M. Roux determined to open the abdomen—search for the injured intestine—separate it from its adhesions—cut it across, if it were not already divided—unite the two ends by suture—and leave the rest to the efforts of Nature. The boldness of the attempt deserved a better fate; and although a great and fatal mistake was made in the operation, Heaven forbid that we should imitate the bad men of our own country, by calling down imprecations on the head of that surgeon, who hazarded his reputation to alleviate the miseries of a fellow-creature!

We shall not detail the steps of this proceeding. An opening was made into the abdomen between the umbilicus and pubes—the intestine was searched for, and supposed to be found—the two ends were drawn out, incised, and reunited by suture—and then returned into the abdomen. The patient died in 38 hours afterwards. The account of the dissection, as well as that of the operation, defies comprehension in many of its parts. We can gather from it, however, that the lower portion of the ileum had been joined to the sigmoid flexure of the colon—and, consequently, that two portions of intes-

time were left opening into the general cavity of the abdomen—the lower extremity of the colon, and also the lower extremity of the ileum. It is difficult to conceive how this could have been done, but knowing, as we do, the anatomical knowledge, and manual dexterity, of M. Roux, it would probably have been much more difficult to have done otherwise than he did, under the existing circumstances of the case. This, we conceive, is the fair, the just, the professional inference to be drawn, when a surgeon of acknowledged ability, education, and experience, has fallen into an error.

It appears, from the account given in our cotemporary, the *MEDICAL GAZETTE*, that much discussion has arisen in the Parisian saloons respecting this operation—some applauding, and others censuring it. That no illiberal criticism, no malicious misrepresentation of the operation, will appear in the Parisian journals, we are quite positive; and sorry are we to observe, in the *ENGLISH REPORTER* of the case, a tincture of that censorious spirit which it is the duty, as well as the wish, of the *MEDICAL GAZETTE*, to expose and stigmatize in the present juncture.

“We record the case, not as one to be imitated, but shunned; and as a most unwarrantable attempt, on the part of the surgeon, who appears to have set the desperate chance—the bare possibility of success, and CONSEQUENT RENOWN OF HIMSELF, against the almost incalculable hazard to his patient.”

The *REPORTER* first informs us, that—“this disgusting malady embittered her life to such a degree, that she continually imploring to be relieved by an operation, however dangerous and painful that might be.” Then again, after the patient had lived, “for a long time,” on a small quantity of rice broth twice in the 24 hours, without any relief—“the entreaties of the woman became every day more pressing, and M. Roux, anxious to relieve her if possible, first planned the operation, &c.” How the reporter could, after putting the above on the record, proceed to accuse the Parisian surgeon of wantonly hazarding the life of his patient for the sake of gaining “renown to himself,” we leave him to explain. In this instance, he has put himself too much on a par with the *Borough reporter*, whose conduct has excited such universal disgust.

40. NEURALGIA; OR TIC DOULOUREUX.

The paper lately read by Sir Henry Hallford at the Royal College of Physicians, before a very great concourse of the most eminent men in the profession, has excited considerable interest, in consequence of the attempt made by the talented author of the paper, to point out one of the occult causes of this terrible disease—namely lesion of bone. Sir Henry very properly stated, that in many, indeed in the majority, of neuralgic affections, the pain was excited sympathetically—and, consequently, the source of the malady was not where the effects were felt. It was, however, to the disease, as it exhibited itself in its most awful forms, and in some of the branches of the fifth pair of nerves, that he principally adverted, and that with the view of showing, by some cases detailed, that the neuralgia was caused by diseased bone. In one of these cases, there was an exostosis of the alveolar process—in another, there was disease of the antrum highmoreanum—and in a third, and the most remarkable of all, there was a prodigious deposit on the internal surface of the skull, (which was exhibited at the College) like frost-work, or rather like petrifications, which must have caused great pressure on the brain—was probably the cause of the neuralgia—and ultimately ended, as many of these cases end, in apoplexy. This was the termination of Dr. Pemberton's life. The skull was not accurately examined; but there was great thickening of the os frontis—and a bony deposit in the falciform process of the dura mater. It is a curious fact, recorded by Sir Henry Hallford, that Dr. Pemberton, previously to the development of the neuralgia of which he died, had an abscess twice in the frontal sinuses. There is little doubt, therefore, that his case was one of those dependent on disease of bone.

The experienced and modest author (for modesty generally accompanies experience, and *vice versa*) did not attempt to account for all cases of *TIC DOULOUREUX* on this pathological principle; but merely related these cases, in order to draw the attention of the profession to a cause not generally suspected, and, consequently, to elicit further investigation. As, in the course of the present, or, at all events, of the next number, of this Journal, we shall

have occasion to introduce a very extended article on neuralgia, we will not here anticipate any portion of the information which we shall soon lay before the public. We may, however, mention, that Desault found a diseased state of the bony foramen, through which a branch of the third pair, affected with neuralgia, passed—and that the late Mr. Wilson maintained in his lectures, that disease of bone was not an uncommon cause of *tic douloureux*. Many cases are on record, (one, for example, by Mr. Swan) where accidental injuries have been followed by the painful affection in question. Indeed, a physician of this metropolis, more celebrated for his convivial talents, than for his pathological acumen—gained great credit once, for detecting the cause of *tic douloureux* in a gentleman of distinction. This gentleman was a great equestrian—became affected with neuralgia—and consulted Dr. B——. The knowing M. D. after hearing the detail of sufferings, asked as a first question—or rather affirmed, point blank, that the patient had had a fall from his horse. No great exertion of memory was necessary, on the part of the equestrian patient, to corroborate the sapient observation of the Doctor, who was thenceforth (for a time, at least) the *MAGNUS APOLLO* of the fashionable world !*

That the terrible disease under consideration is produced by *many causes*, we shall show, by abundant proofs, in an approaching article—and, among other things, we shall bring forward strong corroboration of the view taken by Sir Henry Hallford—as *one cause*, not *this cause*, of neuralgia.

41. REVIEW OF SOME OF THE SURGICAL CASES WHICH HAVE LATELY OCCURRED IN THE ROYAL INFIRMARY OF EDINBURGH—A CLINICAL LECTURE DELIVERED BY DR. GEORGE BALLINGALL, ON the 28th February, 1828. 4to. pp. 23. Edinburgh, March, 1828.

We are extremely glad to see Dr. Ballingall set so good an example to the surgeons of Edinburgh—and indeed to the surgeons and physicians of all public

institutions. The publication of clinical lectures would be productive of infinite benefit, as they would convey the most authentic information of which medical literature is susceptible. In these reviews or retrospects of cases, the clinical lecturer appeals at once to the testimony of his auditor's senses, all or most of which auditors have been eye-witnesses of the cases forming the subject of comment. We shall endeavour to diffuse the contents of this lecture as widely as possible.

I. Injuries of the Head. It is to this important subject Dr. B. first draws the attention of his pupils. The case of James Wylie, aged 28, is reviewed. He was found lying at the foot of a precipice, over which he was supposed to have fallen in a state of intoxication, and was brought to the hospital in a condition of stupor and insensibility, from which he was recovered by local and topical blood-letting. The case was a fine specimen of *concussion*.

The cranial fractures appear to have all been of a formidable character. The following is a very remarkable case.

"This man, apparently about fifty years of age, was brought in by the police, having been found in an area into which he had fallen; he was evidently in some degree under the influence of spirits, of which he smelt strongly, but at the same time showed symptoms of a fatal injury at the base of the skull; hæmorrhage from the ears, continued delirium, and effusion under the posterior part of the scalp; the appearances altogether so unfavourable, that you may remember my having remarked at the visit that he was scarcely a subject of surgical practice.

"He survived the accident for two days, his delirium continuing unabated so as to require the coercion of a strait-jacket until within a few hours of his death."

Dissection disclosed a dreadful amount of injury. Blood was plentifully effused beneath the scalp. One fracture extended upwards from the posterior and inferior angle of the left parietal bone, a portion of which was depressed. Another fracture nearly surrounded the superior occipital fossa of this side. A third passed through the petrous portion of the temporal bone, the greater and lesser *ala* of the sphenoid, and, in the posterior part of the ethmoid, united with nearly similar fractures of the opposite side.

* An exfoliation of bone from the nose where the injury had been sustained in the fall, was followed by relief of the *TIC*. This completed the Doctor's fame.

"Between the skull and dura mater of the superior occipital fossa a large coagulum of from two to three ounces of blood was collected and adhered strongly to the membrane, the corresponding part of the brain being much flattened. Underneath the pia mater of the superior part of the right anterior and middle lobes, blood was extravasated in several places. The lower surface of the left middle lobe appeared to have been lacerated, and from this point a cavity containing about two ounces of blood, mixed with softened cerebral substance extended into the posterior lobe, the parietes of this cavity were pulpy, and of a reddish grey colour. The inferior surface of the opposite lobe had undergone a similar change but to a less degree." It is not a little surprising that the usual symptoms of compression were here nearly wanting, while those of excitement were prominent till the last.

Another remarkable case of compound fracture of the skull is detailed. The patient was irrational and violent—the wound was in the forehead—and a portion of depressed bone having been elevated, and a piece of brain having escaped—"the patient instantly recovered his senses, and answered questions rationally." He soon relapsed, however, and died in 48 hours from the receipt of the injury. On dissection, it was found that fractures had run down through the orbital plates to the base of the skull, with laceration of the dura mater, brain, &c.

"As young men, who have necessarily much to read and much to learn, it may be well to caution you here against the extremes into which surgeons have run in estimating the advantages of artificial interference in injuries of the head. 'Look,' says Mr. John Bell, 'into the books of the ancients, and you would believe that every capillary fissure was attended with peculiar danger, and that without the most adventurous operations, the patient could not live; name me,' says he, 'one absurd or cruel measure—the amputation of large pieces of the scalp—the widening of fissures—the perforating the cranium with many trepans—and opening the dura mater for every idle suspicion or imaginary purpose; name me, any extravagance for which their works do not afford us a precedent.' 'Turn again,' says Mr. Bell, 'to the works of more modern authors, and you

would be persuaded that the more violent the fracture the less the danger; that your patient, though he lie in a deadly stupor with fractures of the skull, or deep wounds of the brain, needs but to lie undisturbed or unassisted to insure his perfect recovery.'

"Even in very recent times we find the most distinguished surgeons of the day inculcating practices almost diametrically opposite; Mr. Pott, in England, encouraging a use of the trepan almost unlimited, and Desault in France, latterly renouncing it *in toto*, his practice apparently becoming enfeebled as his experience increased."

II. TRAUMATIC DELIRIUM. In three cases of simple fracture (one of the ribs, and two of the lower extremities) delirium tremens—or, as we would term it—TRAUMATIC DELIRIUM supervened. The first case related was a female (Mary Kidd) aged 65 years :—

"The whole of the left upper extremity is ecchymosed and much swollen; there is a distinct crepitus near the upper end of the humerus, and during the rotation of the bone the head remains motionless, the lower end of the bone is drawn in towards the chest, pulse 100 and feeble, belly costive, tongue furred. Injury was the consequence of a fall down some steps on Saturday last; the pain at the upper part of the limb has been constantly upon the increase."

"On the 4th of January she was observed to be labouring under symptoms of delirium tremens; she had been constantly talking during the preceding night, and did not answer questions rationally, had much tremor of the hands; her pulse 90; skin cool, and tongue moist."

"These symptoms continued with considerable variation, and with occasional intermissions, until about the 18th, when a considerable slough was observed on the sacrum and right buttock. This increased progressively notwithstanding the use of every means to protect the parts from pressure, and she expired on the 28th, having been treated during the progress of her complaint with large and repeated doses of opium, with wine, and with diluted spirits according to circumstances; of the former she took upon one occasion at the rate of 20 grs. in the 24

hours, and her symptoms were more than once apparently removed by this treatment.

"The fractured portion of the bone was exhibited to you at a subsequent lecture, and the fracture was found, as it had been represented, to extend through the anatomical neck of the humerus, passing also obliquely downwards into the shaft of the bone. Although the parts appeared to have been in very accurate apposition, and to have had a supply of nutriment from the investing membrane, sufficient to preserve their own vitality; yet no step towards the reunion of the fracture had taken place."

The second case was that of a man, aged 44 years, who was admitted with an inflamed ankle, the result of a fall received a few days previously. The skin was of a dark red colour, very tense, with some incipient vesications; but with so little displacement of bone that a fracture, at the first glance, was not suspected. When this was discovered, leeches and proper means were used, and every thing appeared to be going on well for ten or eleven days, when "DELIRIUM TREMENS" supervened, and proved fatal in four or five days. The patient exhibited all the symptoms which we observe in the advanced stage of typhus. Dr. Ballingall alludes to the paper on traumatic delirium, by Baron Dupuytren, which we lately published in this Journal; but refers to the writings of physicians for full information on this subject. We cannot admit that this disease is identical with *MANIA A POTU*, described by the authors in question.

III. *TETANUS*. This is the case published by SCOTUS, and adverted to at page 170 of this number. SCOTUS has embellished (if such an expression be allowed) the particulars of this melancholy accident; but as the main facts of the case are substantially correct, we can only censure the *animus* with which the minor ones are exaggerated.

IV. *HERNIA*. The following case of strangulated hernia, with the clinical observations of the operator, we shall give from the report before us.

"This patient, *James Davidson*, about 45 years of age, was brought into the hospital with a hernial tumour in the left groin, stated to have been in a state

of strangulation for the five preceding days, during which no evacuation from the bowels had taken place. The taxis, in conjunction with bleeding, and the tobacco injection, had been ineffectually employed previous to my reaching the hospital; and without any farther effort I proceeded to the operation. In consequence of the tender state, and near approach to gangrene in the protruded part of the bowel, I was induced to make the division of the stricture unusually free, so as to permit the gut to be returned without the risk of laceration; the patient's bowels were freely relieved during the course of the ensuing night; but his strength was greatly exhausted, and he sunk on the following morning, having survived the operation only about fourteen hours.

"Although this operation was not attended with the happy result which I have generally experienced, yet it afforded a good illustration of two points in reference to the treatment of this disease, which I am desirous of taking every opportunity to inculcate, the necessity of an early operation, and the safety of its performance. In this case, considering the patient's debilitated state, and the long existence of the strangulation, I was almost induced to regret that any auxiliary means had been attempted. The tobacco injection particularly is a measure, against the indiscriminate use of which I am disposed to caution you. I have seen so few instances of the success of this remedy, and so many examples of its apparently producing noxious effects on the system, that I am inclined to consider the operation a much less hazardous expedient than the tobacco injection in those cases of strangulated hernia, in which it is usually resorted to. You saw, from the preparation which was exhibited to you by Mr. Russell, that, although, in the present case, the incision in the ring was nearly double the extent to which I have usually found it necessary to carry it, yet I ran no risk of wounding the epigastric artery; and this circumstance I am induced to notice, because I apprehend that where we are desirous to encourage the more frequent performance of an operation, we shall be most likely to attain our object, by showing that, if not always successful, it is at least generally safe."

V. *Tumours and Excrescences*. The period embraced by Dr. Ballingall's re-

port appears to have been singularly fertile in bringing forward a number of excrescences and tumours in different parts of the body. The following is a curious and interesting sample.

"Another excrescence of an anomalous character presented itself in the person of Mary Goodfellow, aged 16, who was admitted on the 6th of December, with a cuticle in various parts of the body presenting the appearance of old superficial cicatrices, apparently the result of some general cutaneous eruption; at the left commissure of the lips, at the anterior margin of the left axilla, and on the left fore-arm, immediately below the flexure of the elbow-joint, were prominent warty excrescences; and in the angle between the right labium pudendi, and top of the corresponding thigh was another excrescence of the same character, nearly as large as a duck's egg, it was of a soft warty texture, its surface apparently consisting of numerous granular bodies, of a florid red colour; and was by many very aptly compared in its appearance to the roe of a salmon. The history given of the origin and progress of the complaint, by the patient and her mother, was exceedingly unsatisfactory, and in many respects altogether contradictory; on one occasion it was stated to have been growing from her infancy, and on another to have originated only a few months ago; by some it was considered as a form of frambœsia or yaws, by others as a case of sibbens, and by others as a venereal affection; my own opinion, at first, was rather in favour of the latter supposition, chiefly from an apparent desire on the part of the patient and her mother to conceal its true origin, and from its resembling in appearance, those cauliflower excrescences, frequently met with on the prepuce and glans of the male, as a sequela of venereal ulcers or abrasion; at all events, the disease was obviously of an extended and constitutional character, and hence, upon consultation with my colleagues, it was agreed to try the effects of constitutional treatment.

"The girl was therefore put upon a course of mercurial pills, and a solution of corrosive sublimate, directed as a local application to the excrescence in the groin, the one in the axilla having been previously removed by a scalpel."

On the 13th Dec. we find the mouth

sore—the swelling in the groin much increased—and a few of the largest of the small granular bodies composing the bulk of the tumour sloughing and falling off daily. On the 5th Jan., the tumour was removed by excision, and some smart fever followed; but the excitement having subsided, the wound began to heal kindly, and soon cicatrized. Her general health improved, and she was subjected to no farther medical or surgical discipline.

We shall be able to introduce but one more case from this report, in the present review.

"On the 11th of January, Elizabeth Hay was admitted for the purpose of having a tumour removed from the scalp, which is thus described in the journal:—
'Over the vertex of the head, and attached by a broad base, is a large firm tumour rather greater than a clenched fist. It is moveable on the skull, and in some parts has burst, discharging a thick yellow matter; around the places where it has burst, it is of a soft consistence, towards the base it feels harder. All over the body are small soft tumours, generally attached by soft pedicles, and from the size of a pea to that of a walnut.

"States that her skin has been, from her infancy, covered with these tumours, which gave her no inconvenience till within the last three years, when the one on the vertex became painful, swelled, and attained its present size. Three weeks ago it burst, and has since continued to discharge pus. General health good, bowels regular.'

"This tumour was removed by Dr. Hunter, and on investigating its structure, you saw that whatever might have been its original nature, whether akin to the other tumours with which this patient's body was studded over, or not, it had, previous to its removal, assumed a carcinomatous character; you saw at some points the appearance of fibrous bands passing through it in different directions, with matter of a dirty yellowish colour, and atheromatous consistence occupying the interstices between them; at other points the texture of the tumour was completely broken down, and it discharged a most offensive ichorous matter, in so much as to be loathsome to the poor woman, who earnestly entreated its removal.

"In doing so, it was found that the tendon of the occipito-frontalis muscle was involved in the structure of the tumour and the pericranium was left bare after the operation. The sore healed kindly and the patient was dismissed cured on 20th of February."

The other tumours on this woman's body did not come under surgical treatment. They constituted a very rare disease, termed *molluscum pendulum*, by Dr. Bateman. Some remarkable instances of tumours within the orbit are next detailed; but these we shall notice separately in another part of our Periscope.

Dr. B. concludes his clinical lecture with a fervent aspiration that hospital practice may be made more available to the profession, by the publication of clinical reports—"documents of more importance than volumes of idle, uninteresting, or partial detail." Dr. B. is far from undervaluing individual cases, "when recorded in the candid, unaffected language of a Pott or a Hey"—but as a large majority of the cases furnished by individuals "exhibit only the bright side of the picture, they become unsafe guides for regulating our future practice." Well may Dr. B. observe that—"it is not in the occasional detail of an isolated case, whether published on the one hand as a *puff*, or, on the other, as a *satire*, that the improvement of our profession is to be sought."—So say we!

42. INSANITY.

An interesting discussion has recently taken place, in the Westminster Society, on a paper by Dr. Epps, on the subject of *insanity*. The essayist began by remarking the importance of a knowledge "*wherein insanity consists*," to the public at large, but more particularly to the medical man; inasmuch as, to the latter is committed the important trust of consigning a fellow creature to confinement among the insane;—a trust, perhaps, the most responsible that can be conceived. Dr. E. then pointed out a circumstance, or rather doctrine, which had tended very much to impede the progress of the knowledge and the treatment of insanity. This was no other than the doctrine of its *incurability*; a doctrine which Dr. E. conceived to depend upon the metaphysical

notion, that *the mind exists unconnected with matter*; and being thus unconnected, means acting *organically* could have no effect, and, therefore, such means were seldom used.

The object of his remarks, Dr. E. stated, was to prove that insanity is an *organic* (corporeal) disease; and, in establishing this view, Dr. E. treated upon the following points—a definition of insanity, and the terms referring to its kinds—some general probabilities—*erotic monomania*, and its pathology—and some notices on the best treatment of insanity generally, and the theory of that treatment.

On the first point, it was stated that the mind might be advantageously considered as divided into *affective* and *intellectual* faculties, inasmuch as sometimes one class was affected with disease, sometimes the other, sometimes both. Dr. E. then gave cases, wherein the *affective* faculties only were affected; cases in which the *intellectual* only; and cases in which both were affected. Insanity was then defined to be, a disease of one or more faculties of the mind, of the manifestations of which the patient is not conscious, or, if conscious, is not able to control. Insanity was considered as the *genus*, and as *species*, the three kinds already noticed and illustrated. As varieties of these, *monomania* and *polymania* were mentioned; monomania being applied to those cases where only *one* of either class of faculties was affected;—polymania, when *more than one*.

Idiotism was defined to be a *conuate deficiency* in any one or more of the faculties: *fatuity*, the same brought on by *disease* or *age*.

The general probabilities in favour of insanity being an organic (or corporeal) disease, were stated to be, first, that insanity is an hereditary disease: second, the period between 30 and 40, in which most people that are insane have become affected, (all the bodily and mental powers being then in their greatest activity): third, bodily changes, such as menstruation, pregnancy, &c. bringing on this malady: fourth, the effects of season and weather upon insane individuals: fifth, the periodical nature of the attacks of insanity: sixth, the cessation of sleep, &c.

After stating these general probabilities, Dr. E. proceeded to bring forward the particular species of monomania, called *erotic*, known, when affecting women,

under the name of *nymphomania*; when attacking men, under that of *satyriasis*.

A description of this disease, by Pinel, was given; after which, Dr. E. related 14 cases of erotic monomania, in which the cerebellum, particularly that part called the *vermiform process*, was affected with organic lesion; and argued thence, that erotic monomania consists in a disease of the cerebellum.

A reference was then made to the successful treatment of the insane at the Retreat, and it was maintained that this success depended upon the excitement of faculties not diseased. By determining action to the organs of these, the part diseased was enabled to regain its healthy activity, and the patient recovered; and Dr. E. concluded, by maintaining that it is impossible to explain the facts connected with insanity, except by the theory, that the brain is the organ of the mind, and that the brain consists of a plurality of organs, some of which may be diseased, and some healthy; the former giving rise to diseased, the latter to healthy, manifestations of the faculties dependent on the organs.

Upon the conclusion of these remarks, Mr. Bennett rose, and stated his objections. He maintained that the author said *mind came from matter*. To this Dr. E. replied that his statement was, that mind was known only as *exhibited through matter*; and that to say that he said that the brain is the mind, because he asserted the mind is exhibited through the brain, is equally absurd, as to assert that, should he say the *will* acted through the *muscles*, it was his opinion that the muscles are the will. Mr. B. then attacked phrenology, which had nothing essentially to do with the subject before the Society; this being that, in a particular species of mania, a particular part of the cerebral mass was affected. The opinion stated, that this particular part was connected with the sexual desire, the diseased activity of which constitutes erotic monomania, gave Mr. B. an opportunity to attack phrenology, which maintains that the brain is a congeries of organs. The objections of Mr. B. on this point are replied to in Dr. Gall's work on the Functions of the Brain; and, therefore, reference need be made only to another circumstance mentioned by Mr. Bennett, viz. that some animals that have the sexual desire have no cerebellum. To this it was replied

by Dr. E. that Dr. Gall had dissected the different species of animals of the different classes, and had found that all animals having the sexual desire, have the cerebellum, at least that part called the *processus vermiformis*, which is the primitive portion; that in the mammiferous, superadded to this primitive part, are the two lobes of the cerebellum; and that, in the oviparous, insects, fishes, amphibia, and birds, the lobes were generally absent, but the vermiform process present.

Some gentleman rose, and mentioned that, in 20 cases of epilepsy, the cerebellum was found diseased. Dr. E. stated that he was inclined to conclude, from a case at present existing, where epilepsy has been brought on by excessive sexual gratification, that these cases might have had some similar occasion.

It was observed by Dr. Ley, that disease of the brain was not always apparent in cases of insanity; in fact, that numberless cases have occurred, where no disease could be traced. To this Dr. E. replied, by stating the experience of Voisin, Haslam, Lawrence, Esquirol, and others, who maintain the opposite, and whose opportunities of making observations cannot be doubted. It was hinted, in addition, that our inability to detect disease does not militate against disease existing. How often does amaurosis exist, without any perceptible change in the organ of vision? No doubt some change does exist, but we have not detected the same.

It was then objected by a member, that the sexual organs might be the cause of the diseased state in erotic monomania, and the cerebellum and its affection might be only a coincidence. To this Dr. E. replied, by mentioning cases of eunuchs, of women who had no uterus, of old men, whose genital organs are in a state of inactivity, who have had the sexual desire; and mentioned the fact, well known to all, that the genital organs are often diseased, without exciting erotic monomania. In addition, Dr. E. referred to several cases, where the testicle being removed on one side, the opposite lobe of the cerebellum diminished in size; to others, where, from wounds on the nucha, the sexual desire was lost; and, finally, to the circumstance, that children of three, four, five, and six years of age, had experienced the sexual desire, before the genital organs were developed.

Dr. Ley strenuously maintained that the *mind itself* is affected in insanity, and not *its organs*. Dr. Johnson stated that his observations had led him to conclude that, in cases of insanity, there exists functional or organic disease. Dr. Wright, of the Bethlem, stated that, in 100 cases of insane individuals, whose brains he had examined, 90 showed evident marks of disease; and the others some signs, such as the bloody points on cutting through the hemispheres. Dr. Burrows had seen one case, where he could discover no evident disorganization; but acknowledged that, in all cases of insanity, there was corporeal disorder.

Several other objections were made, and answered, but as some of them were personalities, and others relating to phrenology, and as Dr. Epps offered to meet any gentleman who would bring forward the latter science, no further notice need at present be taken of them.

No reader of this Journal will accuse us of advocating the doctrine of materialism; but we cannot help entering our protest against the doctrine of *mental disease*. Mental death is a necessary consequence of such doctrine. The material organ or organs of the mind must become disordered or diseased, before the *manifestations* of the soul can be pronounced in a state of aberration. But to suppose that the soul, the mind, the sentient principle, or whatever else we may call that which *thinks*, should become *sick* or diseased, except from disorder or disease of the corporeal organ by which it is manifested, is a doctrine befitting the days of monkish ignorance, and totally untenable in the present æra.

For our own parts, we have no hesitation in saying that Dr. Epps did himself infinite honour in the paper presented to the Westminster Society, as well as in the prompt and admirable manner in which he met every argument that was brought against him. We shall be extremely deceived, if Dr. Epps does not turn out to be a distinguished ornament of our profession.

P. S. In the third sitting of the Society, on the subject of monomania, Dr. Epps had a more severe ordeal to go through than on any of the preceding nights. Against him was arrayed a most formidable phalanx. SCIENCE poured forth its proud researches—wit and ridicule left

not an arrow in their quivers, all being expended on the field of phrenology, to which the doctor's opponents had artfully shifted their ground—Eloquence, with dulcet accents and melodious cadences, *prolonged* the torrent of declamation—and CANT itself preached forth its little anathema against the *immortality* of making insanity a disorder or disease of the brain, as the organ of mind! But all would not do. Dr. Epps, with irresistible strength but the meekness of a lamb, laid his numerous opponents, one by one so softly and gently on their backs, that they scarcely felt the fall! He bravely maintained that the brain is a congeries of organs, each adapted for the *seat and manifestation* of some faculty of the mind or soul—and, as a natural consequence, argued that it was not the soul or mind which became diseased in insanity, but merely the material organs through which the faculties of the mind were manifested. We consider this localization of the mental faculties as subversive of materialism—grateful to the Gods, and gratifying to man.

Tu piæ lætis animas reponis
Sedibus, virgæque levem coerces
Auræa turbam—superis deorum
gratus, et imis.

No doctrine, we conceive, in the whole range of physical or metaphysical inquiry, is so well calculated to support the dreary desolating prospect of annihilation, as that which attributes to the *mind* the liability to sickness. No advocate of this doctrine can pretend to maintain the immateriality or the *immortality* of that which is subject to *disease*. If the mind is subject to one, two, or three kinds of disease, as mania, monomania, idiotcy, &c. it is impossible to say that it is not liable to dozens of diseases. It may have *jaundice*, and see through a distorting medium—it may be *bilious*, and then it becomes waspish, fretful, and irritable—it may catch an ague, as did the soul of Cæsar, "when he was in Spain," and then—
"Its coward lips will from their colour fly."

In short there is no end to the absurdities involved in the doctrine of *mental diseases*. No man upholding this doctrine, can maintain that mind is not matter—and, if matter, it must be brain. Adieu, then, to the exalted sentiments of a Plato, or a Cato. that "the soul, secured in her existence, smiles at the drawn dagger, and defies its point."

43. OUTLINE OF THE NATURE AND CURE OF STAMMERING, OR HESITATION OF SPEECH. By HENRY M'CORMACK, M.D.

Being in New York, in the year 1826, I learnt that a Mrs. Leigh of that city, had acquired great reputation for the cure of hesitation of speech, such as stammering, &c. I soon found also that Mrs. Leigh had obtained, from several eminent medical men, who were, of course, incapable of lending themselves to a falsehood or deception, certificates of their belief in the reality of Mrs. Leigh's cures. These gentlemen had been admitted into this lady's confidence, and permitted to witness the process of cure, on pledging their solemn promise never to divulge the secret. They therefore gave their attestations to the fact that, the same means invariably produced the same favourable results. As I could glean no satisfactory information on this subject from books, I very zealously applied myself to an investigation of this distressing DEFECT—which investigation occupied my mind, day and night, during a tour through the United States. With equal confidence and satisfaction, I can now assert that the cause of stammering, hitherto so inscrutable, is not only easily understood, but capable of being removed with the utmost facility, by any one acquainted with the said cause, and who will take the trouble to put the simple process of cure into operation. A few words will suffice to convey to the reader the result of my investigation; a fuller exposition of which will be offered to the public in a small work, now preparing for the press.

During the act of speaking, air must either be passing *out* or passing *into* the lungs—or, at all events, out or into the mouth—that is, during expiration or inspiration. Most people (who have a perfect command over the organs of speech) can articulate imperfectly and with difficulty during *INSPIRATION*—but not so the stammerer. In attempting to speak, while *drawing in* the air, or while the lungs are empty, or nearly so, *he* will not be able to articulate at all; and not knowing the cause of this inability, he will make repeated, and often convulsive efforts, accompanied with more or less of those hideous distortions of counte-

nance so characteristic of the stammerer, until, by accident, rather than by design, he draws in a full breath, and effects the utterance of his words, while the air is flowing naturally *from* the lungs. I repeat it then, that—*STAMMERING ARISES FROM AN ATTEMPT TO SPEAK WHEN THE LUNGS ARE EMPTY, OR WHEN THE STAMMERER IS DRAWING IN HIS BREATH.* This habit having been once contracted, generally becomes aggravated by time; and I need not say that thousands of individuals are almost cut off from social intercourse, and rendered miserable by the said impediment.

From these premises, which I know to be correct, the method of cure will be easily understood. It consists in making the stammerer (if a child, for an adult can do it himself) take in a deep inspiration, and repent, with the whole force of the *expiration*, the different letters of the alphabet—numerals—monosyllables, *one by one*. This may be prefaced or not, by several hours practice of slow and deep breathing. As for the repetition of the monosyllabic pronunciation, it must be continued for hours, days, or weeks, according to the condition of the patient, such as his age, capacity, strength of lungs, or inveteracy of the impediment. The stammerer must next proceed to the utterance of polysyllables, *during one expiration*:—then short sentences—and, lastly, long sentences; thus reversing, in fact, the evil habit, until, at length, a new habit is acquired, and the cure effected. In some cases, this desirable object will be accomplished in a few hours—in others, it will require months. In general, a few days, or at most, weeks, will be sufficient.

Having put this discovery to the test of experiment, and completely verified the theory I had formed in my mind, I need hardly say that I choose the pleasure of communicating a blessing to my fellow-creatures rather than the acquisition of personal emolument. It is an additional satisfaction to me to reflect, that this discovery of the cause and cure of stammering, was not a mere lucky thought, but the result of physiological investigation.

It is not my intention, in this short notice, to enter on a consideration of certain forms of hesitation of speech, dependent on organic defects, or which

occur only when violent passions of the mind are in operation. Neither need I advert to the absurd remedies which have been proposed for this distressing malady—or rather mal-habit. SLOWNESS of UTTERANCE is the most universal recommendation in such cases. But this, without reference to the BREATHING, above alluded to, will be found totally inadequate to the object in view. The cutting of the frænum linguæ—the Demosthenic practice of addressing the ocean with pebbles in the mouth—speaking with the teeth closed—with the tongue applied to the anterior part of the palate, &c. need not here be discussed. The use of purgative medicines, where the nerves of speech are sympathetically disordered by the digestive organs, is a more rational and effective remedy than any of the above; but this alone will not avail in habitual stammering.

I have the satisfaction of not merely hoping, but of knowing, that this short and simple exposition will, in the hands of my medical brethren, be the means of communicating an invaluable blessing and enjoyment to thousands of my fellow-creatures—of rescuing the community from the harpy claims of mercenary Charlatans—and removing from the medical profession the opprobrium of being unable to do that which is effected by men and even women, unacquainted with the structure, the physiology, or the diseases of the human frame.

44. GLEET, OR CHRONIC GONORRHEA.

In Professor Smith's Philadelphia Monthly Journal of September last, Dr. McKnight communicates the following observations on the above-mentioned troublesome complaint, elicited in consequence of reading an extract from the Medico-Chirurgical Review on the same subject.

"My experience in the treatment of the above disease is by no means limited. During a practice of eleven years, six and a half of which were spent in the United States Army, I have met with every variety of case. It is to be presumed that every surgeon treats the disease in its first stage as one of an inflammatory character. I shall, therefore, confine my observations

to its chronic form and to that stage which strictly deserves the name of gleet.

"After the first four or five days, if the proper antiphlogistic remedies have been employed, the discharge is changed from a green, yellow, or greenish yellow, to a light straw colour, which may with great propriety be termed the second stage of the disease. I prescribe the following mixture: tinct canthar. vesicatoriæ, 6 drachms, balsam copaib. 2 drachms; mix; dose 10 drops morning and evening, gradually increasing until the cure is effected, which is generally in a few days.

"In the third stage of the disease, which may be nosologically termed gleet, the discharge is white, more or less in quantity, unattended with ardor urinæ, and, if allowed to progress, followed by pain in the lumbar vertebræ, with general debility. Here I employ the tinct. cantharid. vesicat. alone, or blend it with the balsam for the purpose of disguising the remedy (the balsam alone is not to be relied upon, I having given it in some cases to the extent of a pint without any effect), commencing with 15 drops of the active remedial agent three times a day, and cautiously increasing the quantity until the discharge ceases and the disease is cured.

"In obstinate cases of long standing that have fallen under my notice, I have found the ol. terebinthinæ a useful auxiliary. Chalybeates with a generous diet are highly proper.

"The above practice was taught me by my respected preceptor, Professor Hosack, in 1814, and having succeeded in every case to which my attention was directed, has superseded the necessity of hunting after new remedies."

45. INFLAMMATION OF THE PLACENTA.

On this subject, M. Brachet has published a paper in a recent Number of the Journal Général, which we shall here notice. M. B. remarks that this inflammation is equally dangerous to the mother and the fœtus. By intercepting or deranging the placental circulation, it may destroy the latter quickly, or lead to abortion. Where the phlogosis is not

so extensive or intense as to destroy the life of the embryo, it may greatly injure its health and obstruct development, by diminishing, more or less, the nutritive materials supplied by the mother. This inflammation is dangerous to the parent, because it may spread to the uterus, which is a serious consequence. Even in the induction of abortion, it is not devoid of danger to the mother. The causes of this placental inflammation are, blows on the abdomen, falls, shocks, violent contortions of the body, frights, strong mental emotions, &c. Inflammatory affections of the mother, and especially metritis, may also lead to placental inflammation. If, after the application of one or more of these causes, we find a pregnant woman complain of pains in the loins, coming on periodically, but never entirely ceasing, leaving in the intervals a dull and uneasy sensation, we may presume that there is placental inflammation in existence. In such case, abortion is imminent—or, if this do not take place, the life of the fœtus is in danger. We cannot be too early in our endeavours to remedy the evil; and as, in all other inflammations of parenchymatous structures, blood letting is the most effectual measure. But timid depletion will not succeed. The patient should be kept in the horizontal position, and a large quantity of blood should be detracted. To quietude, position, and venesection, cold drink should be added. But it is not sufficient to remove the more urgent symptoms. Antiphlogistic measures should be continued, till all sense of weight, pain, or uneasiness, is removed from the loins or uterine region, in order that induration of the placenta, the consequence of chronic inflammation, may not succeed the acute form, and thus produce those troublesome adhesions of the placenta to the uterus, which require manual force for separation after delivery.

Dr. Brachet has no doubt that many morbid conditions of the placenta escape our notice, in consequence of the little attention that is paid to the examination of this part after its removal from the uterus.

46. VOLUMINOUS ABSCESS (SO CALLED) IN THE ABDOMEN.

M. Gaspero, aged 19 years, of weakly constitution, but most dissipated habits, and fond of violent gymnastics exercises, began to complain of debility, loss of appetite, perspirations, and wandering pains about the spine and abdomen, which did not, however, confine him to the house. In the month of September, he became affected with icterus, which soon disappeared; but his health continued to decline. On the 25th October, he consulted Dr. Cartoni, on account of acute pains in the dorsal portion of the spine, augmented by motion, but not by pressure. He was emaciated—had slow fever, and some cough. The physician considered the complaint as inflammation of the spinal marrow, and advised repose, leeches, low diet, &c. On the 2d November, Dr. C. found the patient complaining of severe pain in the spine and abdomen. The emaciation had increased—the tongue was red—there was much thirst, with slow fever—constipation—burning heat in the interior—cough—quick pulse. It was with some surprise that Dr. Cartoni now discovered a tumour, of considerable size, in the epigastric and umbilical region, evincing a distinct fluctuation throughout its whole extent. The examination led to the belief, that an immense abscess existed. It is unnecessary to say that no remedy proved of any avail, and in a consultation, at which the celebrated Vacca assisted, it was determined to open the abscess, warning the patient and friends of the danger of the operation. On the 19th November, Dr. Cartoni plunged a bistoury into the most depending part of the tumour, and gave exit to a large quantity of pus, mixed with flocculent matters. When about seven pints were drawn off, syncope threatened, and the orifice was closed. At the subsequent dressings, some hydatids came away along with the puriform discharge. The patient died six days after the operation.

Dissection. The abdomen contained some quantity of serous effusion. An immense sac, denominated the parietes of an abscess by the authors, was adherent to various viscera, displacing them in different directions, and greatly encroaching on the thoracic organs. This sac contained about twelve pints of fetid fluid,

in which swam an immense number of vesicular bodies—in other words, hydatids.—JOURNAL DE PROGRES.

Remarks. This case, which is by no means uninteresting in itself, is calculated to excite some reflections that may not be improperly indulged on this occasion. In the first place, the case furnishes intrinsic evidence that Dr. Cartoni trusted to the symptoms described by the patient, and made no accurate examination of the naked body, at the time when he was first consulted. It is quite impossible that between the 25th of October and the 2d November, the disease above described could have formed, or even greatly augmented. In October, all was referred to the spine—in November, an immense tumour was found in the abdomen! The statement that pressure on the spinal column did not increase the pain, would infer an actual examination of the naked body—but the history which follows leads to the inevitable conclusion, either that the naked body was not examined—or that only *one side* of the case was investigated. Dr. Cartoni does not seem to have remembered the wise maxim—"audi alteram partem." No! In Italy, as in England, the patient's story appears to be heard, with some degree of impatience, and a hasty conclusion is drawn without any examination of the organs or parts to which the patient refers, as the seat of suffering. What would be thought of a surgeon, who, on being called to a lady, some nine or ten months after her marriage, complaining of pains in her back, should sagely conclude that there was inflammation of the spinal marrow, without making any examination of the abdomen? That Dr. Cartoni would have found the same tumour in the abdomen, on the 25th October, which he afterwards found on the 2d of November, (had an examination been made,) will not be denied by any man in this world, who knows an atom of the nature and progress of organic diseases. The surprise, therefore, which he evinced, on discovering the tumour, should have been mixed with no inconsiderable degree of shame;—and we hope that this example will not be lost on the rising—and even the falling generation of the profession.

In the second place, we object to the

term *abscess* being applied to this disease. It was a large hydatid, within which a number of other hydatids were produced—and the fluid, said to be purulent, fetid, flocculent, &c. &c. was nothing more than a modification of the fluid usually found in hydatid cysts. We hope this case will make the proper impression on medical men, and help them to believe that the investigation of diseases requires all the aid of all our senses—and that he who scouts any auxiliary that does not come within the range of common *roulinism*, is an enemy to the progress of medical science, and to the honour and respectability of its professors.

47. WALKING THE HOSPITALS.

—viresque acquirit cundo.—Virg.

In a late number of the Medical Gazette, there was a letter from "a Bartholomew Student," on what is commonly called walking, or, more properly speaking, *running* the hospitals. In the letter in question, the gentleman states, what is perfectly true, that, be the present system as bad as it may, and in many instances undoubtedly is, still more, after all, depends on the pupil himself than on his teacher. It has been said that the administration of an oath in courts of justice is a mere dead letter, because an honest man will tell the truth without it, and a rogue will not regard it. It must be remembered, however, that there is a very large class neither strictly honest, nor downright rogues, who might be tempted, by interest or convenience, to *tell* a lie, but would probably shrink from *swearing* one. Precisely the same line of argument might be applied to clinical instruction. If a pupil be exceedingly diligent, he will do almost as well *without* it; and if a pupil is exceedingly idle, he will be little or none the better *with* it. But here again, the majority is made up of young men who are neither very industrious nor the reverse; who might be disposed to work, if the path was smoothed for them; but turn aside in despair, when they find that there are no facilities—no encouragement—in short, that all is to be done by the sweat of their own brow.

We can scarcely conceive a more ludicrous scene than may be witnessed any day in the week, at most of our London Hospitals. The surgeon is announced, calls for his book and his dresser—sees half a dozen bad legs in the out-patient's room, and then proceeds to *walk* the hospital, with a mob of some seventy or eighty pupils at his tail, like so many *sheep* after a shepherd. Now commence the scrambling and *mêlée*; some trying, vainly trying, to catch a glimpse of the case—others to pick up an observation of the surgeon's, the latter reminding one irresistibly of the lines in Goldsmith—

"And still they gazed, and still their wonder grew,
That one small head could carry all he knew."

This is the industrious portion of the crowd; the rest, and by far the greater number, may be seen following in the *wake*; sauntering along with halcyon listlessness of mind, or collected into groups, and discoursing most learnedly on the last new farce, or the comparative merits of Cribb and Scroggins, those "heroes of the ring." For the truth of this picture, ridiculous and overcharged as it may appear, we appeal to all who are in the habit of frequenting our hospitals, though we are willing to confess that, within the last year or two, there has been an improvement manifested on the part of the pupils. This improvement we do not hesitate to ascribe to the impulse which has of late been given to clinical instruction; and we are convinced that if this mode of conveying information was more generally and systematically adopted, the greatest possible benefit would accrue, both to the teacher and the taught. At present, even at those hospitals where clinical lectures are delivered, they are squeezed out in such a costive manner, as to

"Keep the word of promise to the ear,
But break it to the hope."

We would recommend the physicians and surgeons of our public institutions not only to give, but to give freely—not to content themselves with a clinical lecture once a month, or once a fortnight—not to think that when they have done this, they have done much, but that much is to be done—not to sit, wrapt up in imaginary dignity, upon their hill, but to put their shoulders lustily to the wheel, for the sake of science, and, what is more, for their *own* sakes. "To your tents, O

Israel," say we, and we trust that "Israel" will take the hint. Let each of the medical officers attached to the hospital have his clinical clerk, chosen from amongst the most diligent and best-informed of the pupils; let this clinical clerk be allowed every facility in the taking and recording of cases, and be responsible for their accuracy; and, above all, let these authentic records of hospital practice be open, *at all times*, to the inspection of the pupils. Upon the most interesting cases, and, of course, only those possessing some interest ought to be recorded in this manner, clinical lectures should be delivered. Now we believe that, at most of the hospitals, (we know that it is so with some of those at the West End,) there are two days in the week set apart for the reception of new patients, and on which the medical attendants are not in the habit of going their rounds within the house. The business, on these days, is soon got over, and they should be devoted to the clinical lecture, which need seldom last more than half an hour. If, then, two of the medical officers will dedicate, each half an hour, once a week, to clinical instruction, it will surely be no great tax upon their time, and will prove of the greatest advantage to their pupils, as well as ultimately to themselves. If two lectures in the week are found to be too much during the Winter season, (we are not of that opinion ourselves,) let only one be given, and the number increased during the Summer; but, in God's name, let something be done, and that quickly, to infuse a little zeal and energy into the minds of our medical students, very many of whom, at present, "crawl from the cradle to the grave" without a particle of either one or the other.

48. CHRONIC ULCERATIONS OF THE TONGUE AND PHARYNX CURED BY IODINE. By M. MAGENDIE, Physician to the Salpêtrière.

The illustrious author observes that he never enters this melancholy asylum of reputed incurable diseases (the Salpêtrière) without turning his mind to the search after a remedy for some of the terrible afflictions which surround him,

The cases of cancer are above all deplorable, and he is not without hope that the large doses of iodine which he is now employing in this disease, may prove serviceable. In the mean time, he reports two cases of old ulcerations considered incurable, which have completely yielded to the remedy in question.

Case 1. A female in the ward St. Nicolas, of lymphatic constitution, had enjoyed good health till the age of 30, when menstruation became irregular, and epileptiform attacks made their appearance. After a time, a new malady supervened. Ulcers of a kind which the patient could not well describe broke out on various parts of the body and limbs:—some exfoliations of the tibiae and bones of the arm also took place. Excrescences were now seen on the pharynx and tongue, and the attendant physician, conceiving the complaint to be syphilitic, notwithstanding the positive denial of the woman, she was put upon a mercurial course. Under this treatment the ulcerations of the body and limbs healed; but those of the tongue increased. In the course of time the patient lost her voice, which was attributed to ulceration of the chordæ vocales. In this deplorable condition, M. Magendie ordered a solution of the hydriodate of potash to be exhibited, and the dose to be gradually increased, till it amounted to 36 drops in the day. The good effects were soon conspicuous, the surface of the ulcerations cleaned, and, in fifteen days, those of the tongue were completely healed. In a little more than a month, the other ulcers were also cicatrised. When every thing appeared to promise success a violent dyspnoea came on, and all the symptoms usually attendant on œdema of the glottis. Antiphlogistics failed, and tracheotomy was not practised. The patient sank. On examination, the interior of the larynx was found covered with firm and whitish excrescences, ("vegetations,") by which the passage was rendered impervious to the air.

Case 2. Madeline Petibon, aged 41 years, had been in the HÔPITAL SAINT LOUIS four years previously for large ulcerations on the legs. She had scarcely left the hospital, apparently cured, when she was seized with dyspnoea, pain in the region of the larynx, and complete loss

of voice. These symptoms continued, and, at the same time, large ulcers broke out on the face and neck, as well as on the tongue. Various modes of treatment had been put in practice, but without much relief, and she entered the Infirmary of the Salpêtrière, in March 1827, three years after the commencement of the facial ulcerations. Her nose was now almost demolished—various fungous ulcers were spread over the face and tongue—deglutition was very difficult—the respiration was impeded—articulation almost annihilated. On the 27th June the patient was put on the use of tincture of iodine, and the dose was gradually increased. The ulcerations at last were entirely healed, and a complete cure is now effected.—*Journal de Physiologie.*

49. WOUND OF THE ANTERIOR TIBIAL ARTERY.

The following case is interesting, as it shows how soon a retrograde current of blood may be established in arteries, and hæmorrhage thus produced in divided vessels, unless a ligature be applied *below* as well as above a wound. The case occurred in the practice of Dr. R. N. Smith, now Professor of Surgery in the University of Maryland, and successor to Professor Granville Sharpe Pattison, of the London University.

"The patient, a Mr. Blodget of Jericho, Vermont, wounded the anterior tibial artery, a little below the middle of the leg, with a narrow chisel which entered from the outside of the leg, just anterior to the fibula, and divided many of the fasciculi of the exterior muscles which envelope the artery. Undoubtedly the artery was merely partially divided by the angle of the instrument. I infer this from the effects which resulted.

"At the instant of the wound there took place a copious gush of blood, which very much alarmed the patient and friends. Dr. Hamilton, an intelligent young physician, was sent for, who, on his arrival, found no difficulty in suppressing the hæmorrhage for the time by means of compression. As he had reason to believe the artery completely divided by the instrument, he presumed that the

pressure being continued, the hæmorrhage would not recur. The patient continued apparently to do well, no more than the usual degree of inflammation supervening, until the end of two weeks, at which time, on attempting to make a greater effort than usual with the limb, blood gushed from the wound as furiously as when the limb was first wounded. Dr. H. was immediately called, and on his arrival the hæmorrhage was commanded as before by employing pressure. The limb being at this time a good deal tumid, from diffusion of blood in the cellular tissue, Dr. H. presumed that the artery could not be found by searching the wound.

"After this the bleeding occurred at intervals for two or three days, when I was called to the patient at Dr. Hamilton's request. We agreed that, as the wound was remote from anastomosing branches, and as the vicinity of the wound was much injected with blood, the best method would be to cut for the artery above the wound, and very near the middle of the leg. I immediately proceeded to the operation, and without much difficulty exposed the artery where it lies deeply imbedded between the *tibialis anticus* and *flexor communis* muscles. A ligature was thrown round it, not without some embarrassment, in consequence of its depth and the tension and volume of the muscles. Before trying the ligature I held my finger upon the artery, and distinctly felt its pulsations, and in order to assure myself that the artery was included, I drew upon the two ends of the thread, and immediately the artery ceased to beat. This I repeated several times, so that there could be no doubt that the artery was secured. The ligature was then firmly tied, and immediately the pulsation, which before could be seen in the orifice of the wound, ceased entirely, and the blood also ceased to flow.

"As the hæmorrhage did not return, I left the house with very little apprehension as to the result. As I was many miles from home, however, I slept that night in the neighbourhood. In the morning I was much surprised at being called in haste to visit the patient on account of the return of the bleeding. On my arrival, however, it had again ceased; yet there was obviously a pulsation in the wound, similar to that which had been observed before the operation.

"On applying my finger to the anterior tibial, upon the instep, (where all pulsation had ceased immediately after tying the ligature) I was surprised to find that the artery pulsated vigorously, and on comparing its beat with that of the opposite foot, I was still more surprised to find that it was much stronger and more full in the wounded limb than in the other. To ascertain the direction of its current, I then placed one finger upon the upper part of the artery, and pressing it firmly so as to stop its circulation, I felt for its pulsations below, and found them still vigorous. I then reversed this, and found that the blood was passing in a full stream in the retrograde direction.

"I thought it advisable, before attempting any thing further with the knife, to endeavour to prevent the recurrence of bleeding by compressing the artery upon the top of the foot. This was accordingly done, and apparently with good effect. As, however, I could not remain with the patient to witness the result, I advised Dr. Hamilton, should the bleeding recur, to cut down upon the region of the wounded artery, and endeavour to make compression upon the wounded vessel. This he was subsequently compelled to do, and with difficulty he saved the limb."

50. THE INFLUENCE OF ANATOMICAL VARIETIES ON SURGICAL OPERATIONS. By M. ROBERT.

Anatomical deviations have been studied physiologically, and from this study have been deduced the laws of their formation, and the development of monstrosities. The study of these varieties of structure, under a surgical point of view, would be of great benefit to the surgical world, and to society at large. Suppose, for example, a surgeon is called on to operate for an aneurism of the brachial artery at the bend of the arm,

* Philadelphia Monthly Journal, No. I. Vol. II.

and is ignorant that this vessel may bifurcate as high up as the axilla. Instead of searching carefully for the vessel which is diseased, he ties that one which lies in the usual place. Meanwhile the tumour enlarges, and at length bursts. Attention to the study of anatomical varieties prevents such oversights as these. It is of great importance that the surgeon, when operating, should be acquainted with all the anomalies of structure which the part may possibly present. With this knowledge in his mind, he will not be alarmed or embarrassed in his operation, should the anomaly exist. M. Robert has evinced great industry and research in this extended Essay, and the order which he follows in his inquiries, consists in a successive examination of the great regions of the trunk and the extremities, subdividing his researches into varieties of structure in the bones, the ligaments, the muscles, the vessels, the nerves—and lastly the viscera themselves. We shall follow our author, and endeavour to present our readers with a succinct account of his researches.

I. The HEAD-BONES, and FACE.

The cranium presents great varieties in structure and shape. We often meet with depressions and protuberances, which might be confounded with sanguineous tumours or fractures of bone, after contusions. The defect of ossification, in consequence of which the fontanelles sometimes remain unclosed, is a common variety—but it is not so well known that the brain sometimes protrudes through these apertures, and forms an *encephalocele*, which becomes strangulated as the bones thicken; and requires the trephine at the sides of the unnatural opening. In very old people, the skull becomes so much attenuated, in some places, as to render operations hazardous, if this circumstance be not borne in mind. The frontal bone has remained divided by a prolongation of the sagittal suture, and has been taken for a fracture, of which a remarkable instance is recorded by Quesnay.

A very curious case of development of the vessels of the diploe is given by Frank.

A peasant, aged 24 years, in a scuffle

with a soldier, received a sabre wound on the anterior and right side of the frontal bone, an inch and a half from the sagittal suture, where it is obliterated at this place in the adult. The sabre had removed a portion of the external table of the skull. The man neglected himself for some days, and when Frank arrived there were such symptoms as induced him to apply the trephine in the neighbourhood of the wound. As soon as the saw had arrived at the diploe, a torrent of blood issued forth—and, in short, the patient died of the hæmorrhage the same day. On dissection, it was found that there were seven vascular communications between the dura mater and the diploe, through so many foramina in the internal table of the skull, at this place. Hence the fatal hæmorrhage. More recently, Magendie attributes to this kind of hæmorrhage, the majority of those cases reported by writers, where *extravasated* blood has issued forth after the application of the trephine.

A great many varieties occur in the anatomy of the face. The supra-orbital foramen may be placed quite behind the orbit, making it extremely difficult to divide the frontal branch of the fifth pair, in the *tic douloureux*. The *os unguis* is sometimes wanting, and its place supplied by the nasal process of the superior maxillary bone. In such a case considerable difficulty would be experienced in perforating the bone for *fistula lachrymalis*. In some individuals a middle bone is found between the two portions of the inferior maxillary; it may either be single or divided by the symphysis into two, and, from its mobility, has been mistaken for a fracture of the lower jaw and treated accordingly. There may be two *ranine* arteries, so that in *glossitis* our author prefers making deep incisions on the dorsum of the tongue, to opening the *ranine* veins. When, as sometimes happens, the *membrana pupillaris* remains after birth, it is necessary either simply to puncture it, make a free division, or cut away a point of the circumference of the iris, and form an artificial pupil. The inferior orifice of the lachrymal canal is frequently guarded by a valve, obstructing the passage of the stilet. There are sometimes two *stenonian* ducts which should be remembered in the operation for salivary fistula. Not unfrequently the spinous

process of the seventh cervical vertebra, is separate from the rest of the bone and moveable beneath the skin. After an injury upon the part, this might readily be mistaken for a fracture. The scalenus medius of Soemmering, when it exists, separates into two bundles the nerves of the axillary plexus. This would cause much embarrassment in the operation for tying the subclavian. Sometimes the muscle is directly interposed between the artery and nerves which would completely protect the latter, and in a child, which we had an opportunity of examining last Summer, there was no scalenus *anterior* muscle at all, so that the subclavian vein lay in contact with the subclavian artery. The omo-hyoideus may arise not from the scapula, but from the middle of the clavicle, which would also embarrass the operator on the subclavian.

II. VESSELS OF THE NECK.

Allan Burns mentions an instance, and Harrison, we believe, gives another, where the *right* subclavian arose from the *descending* arch of the aorta, and passed across the neck in front of the trachea, as high as the inferior border of the thyroid gland. In such a patient, were tracheotomy performed, the artery would most inevitably be wounded. It must have been some irregularity in the distribution of the great vessels which happened to a celebrated professor of surgery at Berlin, who having performed the operation of bronchotomy on the daughter of a brother-professor, the patient died under his hands.* The subclavian may take the same origin but pass behind, instead of before the trachea between it and the œsophagus. In such a case, care would be required in performing œsophagotomy. A third variety in the course of the right subclavian, is where it takes its rise from the arch of the aorta, beyond the origin of the left subclavian, and on the left side of the body of the second dorsal vertebra. It then crosses in front of the spine, and behind the thoracic duct and œsophagus, lying much exposed to wounds from foreign bodies sticking in

that tube. In 1816, Mr. Kirby* was summoned to a woman, who had swallowed a piece of bone, and who, in spite of tracheotomy died of suffocation and hæmorrhage, apparently from the interior of the œsophagus. On dissection, it was found that a spicula of bone had pierced the posterior wall of the œsophagus, and transfixed the right subclavian, which took this unusual course. When there is this variety, the nervous vagus on the right side, occasionally sends off no recurrent branch, its place being supplied by several branches arising from the inside of the vagal trunk. In such a case, if the carotid were tied these branches would probably be cut, and the voice perceptibly affected. Immediately after its exit from between the scalmi, the subclavian, in some instances, becomes fairly enveloped in the brachial plexus. Perhaps it was owing to this anomaly that the nerve was tied instead of the subclavian, in the case related by Sir Astley Cooper. Zagorsky has observed, that the innominata on the right side was entirely wanting, but it existed on the left.†

It has been well remarked by Hodgson, that aneurism of the innominata, or even of the arch of the aorta, will frequently rise so high in the neck as to be mistaken for aneurism of the carotid, or even of the subclavian. A case of the latter kind is mentioned by Allan Burns, where it was proposed to tie the subclavian artery. Fortunately, however, this operation was not performed.

The right carotid may arise from the arch of the aorta, instead of the innominata. It then mounts up a couple of inches, or more, in front of the sternum, and crosses the trachea, lying exposed, of course, to injury in tracheotomy and wounds of the neck. Both carotids, on the other hand, may arise from the innominata, and then the left takes the course in front of the trachea. In such a case it may admit of doubt whether a ligature of the innominata would not be attended with very serious results in consequence of the stoppage of the flow of blood at

* Dublin Hosp. Reports, v. iii. p. 224.

† The innominata has also been seen rising so high in the neck as to be endangered by the razor of the suicide, or the knife of the tracheotomist.

* Walter. Mémoires de l'Académie de Berlin.

the same instant through one subclavian and both carotids. Portal has related a case in which extirpation of an enlarged tonsil proved fatal in consequence, it would seem, of a wound of the internal carotid, which lay extremely near it. Barclay, also, mentions a similar case.*

Allan Burns observed in a child, that the left vertebral artery took its rise from the arch of the aorta, whilst the right arose from the subclavian, and passed up behind the carotid, along with the sympathetic nerve as high as the third cervical vertebra, where it entered the osseous canal in the transverse processes. In such a case, there would be some danger of including this artery in the ligature if it were necessary to tie the carotid, and besides, an aneurism of the artery in this situation would be readily confounded with one of the carotid itself. However, if a surgeon follows the excellent rule of never drawing the knot upon a vessel till he is satisfied that pressure of it between his finger and thumb stops the flow of blood into the sac, this blunder can never happen. Some varieties occur in the distribution of the thyroid arteries which we shall briefly notice. The superior may arise from the common carotid low in the neck, pass up alongside of that vessel, and then when it has arrived at near the angle of the jaw turn downwards to the thyroid gland. In this variety the vessel is large, and would be in the way both of the external incisions and the ligature in the operation on the carotid trunk. The inferior thyroid also, having taken its usual origin may pass directly in front of the common carotid below. Burns saw both inferior thyroids arise by a common trunk from the subclavian or aorta, which would add to the danger of œsophagotomy. In tracheotomy, it should be remembered, that there is very frequently indeed a large artery, called by Harrison the *thyroideus medius*, which arises from the common carotid, and passes in front of the trachea. Burns mentions a case where this artery arose from the innominate, and passed upon the œsophagus as high as the left lobe of the thyroid gland. The patient was a young lad, and œsophagotomy having been performed, the bleeding from the vessel was so considerable as to require a ligature.

In the operations on the neck, the veins are often sadly in the way of the

surgeon's knife. There may be two or even three external jugulars on one or both sides. Another variety has been noticed by Wilde, where a vein as large as the jugular, was formed by the union of two branches in front of the trachea, and proceeding upwards from thence dipped down by the side of the thyroid gland to join the internal jugular. Of course in laryngotomy and tracheotomy, such a distribution might be productive of considerable embarrassment. A case is related by Virgili in the *Memoirs of the Academy of Surgery*, where, having opened the trachea between the rings, such hæmorrhage took place, that the blood getting into the trachea excited a most violent paroxysm of coughing, forcing out the capula whenever it was introduced. In this dilemma, the man being almost suffocated, Virgili cut longitudinally into the trachea down to its sixth ring, and held the patient's head out of bed, with his face downwards towards the ground. This operation was perfectly successful. M. Roux, in a similar case, introduced a silver catheter into the trachea, and sucked out the blood.

The subclavian artery, external to the scalenus, where it is usually tied in operations, is described as lying in a triangular space, the base of which is formed by the subclavian vein, and the sides by the scaleni muscles, and axillary plexus. The vein however, is sometimes placed much higher than it *should* be. A man had a large aneurism of the subclavian, and the operation for tying this vessel was performed in the usual situation. The tumour was a good deal in the way, but the operator at last arrived at what he considered was the artery, and he was confirmed in this opinion, by finding that, on raising the vessel, the pulsation in the tumour ceased. The ligature was applied—bad symptoms supervened—and the patient died. On dissection, it was discovered that one of the brachial nerves and a part of the subclavian vein had been tied, the needle having passed *through* the latter vessel, which lay higher in the neck than usual. The cessation of pulsation in the sac, on lifting up the nerve was explained, by its having dragged up the artery with it so as to produce considerable compression. The subclavian vein has likewise been seen passing *with* the artery, *between* the scaleni; in

this variety it might either be tied for the artery, or both included in the one ligature. Morgagni found two subclavian veins, uniting where they joined the internal jugular, which would also be an awkward anomaly.

III. VARIETIES IN THE ANATOMY OF THE THORAX.

These are few. The last rib may be deficient, with or without deficiency of the corresponding vertebra. An intercostal space will then be wanting, which should be recollected in the operation for empyema. Two ribs may be joined before or behind, or they may be entirely joined together, and then the double rib is commonly inserted into the sternum by two cartilages. Many varieties occur in the location of the muscles, but these we shall pass over as they are of little practical importance. There may be two intercostal arteries, one taking the course of the *mammaria interna*, the other lying in the middle of the intercostal space, and exposed in the operation for empyema. In a phthisical patient opened by Morgagni, death was occasioned by rupture of the *vena azygos* which was as large as the *superior cava*.

This concludes the first part of M. Robert's Memoir, and we freely award him our tribute of approbation for the patient industry in collecting facts which it evinces. Such men are the pioneers of science, and their task, though uninviting and laborious, is of infinite importance. The subject of surgical anatomy is scarcely paid sufficient attention to in this country, or if it were we should have fewer opportunities of seeing reports of errors and unfortunate operations blazoned forth before the gaze of a credulous and greedy public. We have been at considerable pains to detail the varieties which occur in the vessels of the neck, as the anatomy of that truly *surgical* region is complicated at the best, and the blunders which have been made in it, even lately, are unluckily notorious. In a succeeding number of the *JOURNAL DES PROGRES*, we are promised a continuation of the Memoir, and we shall take care to lay an abstract of it, when it comes, before our readers.

51. HALLUCINATIONS TREATED WITH COLD WATER. By M. F. BROUSSAIS.

A soldier of the 30th regiment of Light Infantry, drank some brandy early in the morning of the first of January, 1828—and breakfasted afterwards, at 10 o'clock, in his usual manner. At 12 o'clock he went to sleep, and was roused up at one o'clock to go on guard. At four o'clock, he and two of his comrades drank three bottles of wine at dinner, without feeling or evincing any disorder. At six o'clock he felt a general sense of cold, with horripilation and tremor in all his limbs, while, at the same time, he gave vent to loud lamentations and shed some tears. These symptoms were succeeded by great heat, restlessness, vertigo, and ultimately by convulsions. He was taken up by his companions, and carried to his bed; but he there became furious and ungovernable, requiring seven or eight people to confine him, and being quite incapable of recognizing his comrades. Instead of these he appeared to behold Satan and a legion of devils around him! At ten o'clock at night, M. Broussais arrived, and found the patient confined partly by cords, and partly by the hands of his companions. He seemed busily engaged with the Satanic bands that attended him, and his countenance had something horrible, and at the same time, ludicrous, in its expression. But the devils were not his only tormentors. A young woman, to whom he had paid his addresses, was present, (in his imagination,) coquetting with certain of his rivals, which appeared to annoy him as much as his infernal visitors. M. Broussais applied cold water to the surface of the body, and caused the patient to swallow a pretty considerable quantity of this cooling beverage, for the space of two hours. This procedure had a surprising effect. The devils began to retreat, in dancing attitudes, which caused the soldier to break out, at last, in loud laughter, at the ridiculous figures which his enemies cut. His sweetheart, too, entirely altered her conduct, and harmony was restored.

Amantium iræ redintegratio est amoris.

By one o'clock in the morning, the hallucinations were pretty well dispelled—he recognized his *SERGEANT*—and the sad realities of this dull world were once

more substituted for the vivid scenes of a distempered *imagination*! We say *imagination*—for it would be sad heterodoxy to impute these hallucinations to a *disordered brain* or other material organ. The cold water and cold drink acted, no doubt, on that “divinæ particula auræ” of our composition, and in this way cured the effects of the brandy in the morning and the bottle of wine at dinner, which seem to have conjured up “in the mind’s eye” a strange assemblage of carnate and incarnate devils.

There was a period when JORDY (for this was the soldier’s name) would have been pronounced to be “POSSESSED”—not of brandy and wine—but of a veritable *DEMON*. Our philosophy is a little changed. Some of our physicians (the *immaterial* ones) now pronounce these hallucinations to be “*mental diseases*”—not *corporeal* disorders. These philosophic physicians seem to forget that they are the real advocates of materialism—and that, in imputing to *soul* the liability to disease, they necessarily subject it to the consequence of disease—DEATH!

52. ILLUSTRATIONS OF THE ORGAN OF HEARING.*

The author of this Essay has for a long time devoted a considerable share of his attention to diseases of the ear. His “*Illustrations of Acoustic Surgery*” were very favourably noticed by many critics, and stamp him as a man fully capable of taking advantage of the practical suggestions of others, and of adding much from the resources of his own mind. From having seen a great number of cases of diminution of hearing which arose from imperfect secretion of cerumen, he has

* *Physiological Illustrations of the Organ of Hearing, more particularly of the Secretion of Cerumen, and its Effects in rendering Auditory Perception accurate and acute; with further Remarks on the Treatment of Diminution of Hearing, arising from imperfect Secretion, &c. being a Sequel to the Guide, and to the Illustrations of Acoustic Surgery.* By THOMAS BUCHANAN, C. M. &c. &c. &c. Royal 8vo, pp. 160, with plates. 1838.

naturally been induced to reflect carefully on the probable uses of this secretion, and its effects on auditory perception. In order to form as correct ideas as possible on the subject, he has consulted various works on acoustic surgery, but the substance of the information he was thus able to glean consisted merely in the observation, “that deafness sometimes depended on a defective secretion of the cerumen, and a consequent dryness in the meatus.” Why a deficiency of cerumen should diminish the power of hearing had not been determined; he, therefore, commenced a series of experiments, the result of which has been the production of the pages we are now to notice. The bitter taste and glutinous consistence of the cerumen, so well adapted, in most instances, to protect the tube and internal parts of the organ from the intrusion of insects, has attracted the attention of various writers. But the author hopes that he has succeeded, in the present volume, in more fully explaining, than has hitherto been done, the beautiful arrangement by which this secretion is rendered subservient to, and at the same time, combines *with*, and produces other and more comprehensive effects on auditory sensation.

Mr. Buchanan has carefully examined the glands which secrete the cerumen, and has suggested some valuable practical observations upon the importance of their perfect and healthy action. We find, upon referring to several modern works on anatomy and physiology, that this subject has been scarcely touched upon. Mr. B. states that, “owing to the immense number of these glands, they are situated so close to one another, that the integuments on which the ducts open appear like a sieve. The mouth of one duct almost touching that of another, and when they deposit the secretion uniformly from the ducts on the surface of the auditory tube, a *ceruminous tubular circle* is formed, that causes a contraction of the meatus.” When the undulations of sound reach the ceruminous tubular circle, they are thrown towards the centre of the tube, by means of this secretion, which contracts its caliber. In their progress through the tubular circle the asperities of the pulsations are softened by its chemical properties, rendered melodious and congenial to the perception,

at the same time condensed, and also strengthened by means of the ceruminous tubular circle which contracts the contracting meatus, and in this manner the current of pulsations reaches the membrana tympani in regular undulatory succession. These ingenious physiological views furnish our author with many practical hints, from which he has derived much advantage in the alleviation of different species of partial deafness, arising from the diminished secretion of the cerumen. Mr. Buchanan touches rather sarcastically upon the frequency of the operation of puncturing the membrana tympani, and upon the idea "that the loss of the tympanum itself is not so detrimental to hearing as it is generally believed!"

According to this grade of the march of intellect, he observes, that we ought not to be astonished if it were to be asserted, that the whole of the osseous parts of the organ are not necessary to hearing, only the *portio mollis*. Such an assertion has been made, and cases in point published,* one of which we will briefly relate, for the satisfaction of our author, as well as our readers. A young girl, at the termination of severe scarlet fever, was affected with violent inflammation, followed by suppuration of the internal organ of hearing. Caries of the bones followed, and the malleus, stapes, and incus were discharged. The tympanum was also destroyed. The power of hearing, however, was not diminished. Gräfe, one of the editors of the able German periodical, from which we have taken the heads of this curious case, afterwards saw the patient who had been attended by Dr. Wolf. A similar case is related in the *Phil. Trans.*

Mr. Buchanan states, that however elegant may be the shape, and however exquisite the organization of the ear, it will be of comparatively little use to the possessor, unless the tube be lubricated by healthy cerumen, which modifies the undulations, otherwise irregular and indistinct, and transforms them into audible and accurate sounds. About three years ago he presented to the Royal

Medical Society of Edinburgh, a specimen of the olfactory nerves of the human subject. He performed the dissection in the course of an hour. The preparation is allowed to be the best of the kind, and caused much interest at the time, from the rarity of such specimens of delicate dissection. The author makes some interesting remarks on a species of diminution of hearing, which he believes not to have been noticed by any previous writer. This form of disease is said to depend upon the extraordinary growth of the *pili auriculares*, which sometimes increase so much in number and size as to impede the power of hearing, and thus a particular species of disease is produced, termed by Mr. Buchanan *hirsulus tubulus*. "It consists of an almost innumerable quantity of hairs that shoot across and block up the tube which is in general completely dry and destitute of secretion." The author has seen many patients afflicted with the *hirsulus tubulus*, and he discusses at some length, the nature of the disease, and the treatment he proposes for its relief. He also details some cases which he successfully treated. It has been supposed, that cold produces an unusual secretion of cerumen, and that the meatus is thus occasionally blocked up. According to the observations of the author, however, the consequence of cold, when affecting the ear, is to suppress the secretion of the cerumen.

Several very important criteria are to be found in the shape and size of the auricle, especially in the angle which it forms with the cranium, and also in the size and depth of the concha, which may assist to determine the prognosis in cases of diminished hearing when the symptoms are obscure. Mr. B. lays down several axioms respecting the figure and aspect of the part, as practical guides for the aurist. He observes, that females ought to be particularly careful in the form of their head dress, so that it may not interfere with, or bind the auricle flat to the head, as the continuance of this kind of pressure, will sooner or later, cause the cartilage of the auricle to contract the horizontal diameter of the meatus, and ultimately block it up.

* *Journal für Chirurgie, und Augenheilkunde* von Gräfe und Walther. Band, 7. Stück, 2. 299.

An Appendix is added, containing physiological and anatomical remarks on the structure of the organ of hearing in different animals. There are also many

neatly executed plates, in illustration of these observations. Upon several hitherto neglected points, relative to the structure and diseases of the organ of hearing, Mr. Buchanan has made many original and important additions. His work cannot, therefore, be consulted without advantage by those who feel interested in the subjects upon which it treats.

53. CASE OF OBSTINATE COUGH CAUSED BY ELONGATION OF THE UVULA, AND CURED BY EXCISION OF A PART OF THE SAME. By Dr. PHYSICK, Professor of Anatomy in the University of Pennsylvania.

Relaxed and elongated uvula is much more frequently a cause of troublesome and harassing cough than is generally imagined. Next to examination of the chest, the state of the throat should be investigated. Where the cough is dry and very frequent, without febrile symptoms, we may suspect elongated uvula, and, at all events we should inspect the fauces. The following very curious case recorded by Dr. Physick, is well deserving of attention.* The patient was a young lady who had come from New Orleans to consult Dr. P. for an obstinate cough. The history of the complaint is thus stated.

"The first circumstances which had any connexion with the singular affection of this young lady, were a complaint of constant head-ach, attended with a disposition to vomit without nausea occurring first, during convalescence from an attack of remitting fever, in the middle of May, 1826. The latter symptom soon became the most prominent, and increased to a constant effort to retch, in which nothing was thrown up from the stomach, and which was not relieved by free vomiting. At this time no complaint of pain was made any where but in the head.

"Considering the gastric irritation as sympathetic of an incipient cephalic affection, leeches were applied to the temples and behind the ears, and some doses of active cathartic medicines given.

* American Journal of the Medical Sciences, February, 1828.

No advantage was derived. The retchings became nearly constant, and from a noisy effort to vomit, it gradually changed to a convulsive cough, altogether involuntary and uncontrollable, and conveying an impression as if something obstructed and irritated the organs of respiration. This is, as nearly as it can be described, the character of the cough ever since.

"The first paroxysm increased in violence for a number of days, and until the 8th of September, when, about mid-day, after vomiting, (which was at this time not unusual with her,) in which she threw off a quantity of white tough mucus, she fell into a state of extreme prostration. The cough ceased and she appeared to be dying. From this she slowly revived through the evening, and on the next day there was a degree of reaction amounting to fever, which gradually subsided and left her quite well.

"The mucous expectoration, likewise, though at the time regarded with some interest, has, in the latter attacks, been produced occasionally in vomiting, but never followed by the same alleviation. On the recovery from the first attack, she remained well for two weeks, when she was again seized with the same spasmodic cough, attended with pain in the breast, but not preceded as before with any irritation of the stomach. This, after continually increasing in violence for about eight days, again left her in nearly the same manner it had done in the first instance. After an interval of three weeks, she had another attack of the same duration, and of extreme severity. Since this there has been two more, but at longer intervals, and not altogether of the same severity.

"The dates of the different paroxysms are the early part of September—of October—of November—of January—and of May. During the long interval between January and May, a slight cough of the same peculiar character has seized her every morning on awaking, after which she remains entirely exempt for the remaining twenty-four hours. At first it lasted for a few seconds only, but its duration gradually increased to thirty or forty minutes. Since the last violent attack it has been reduced to only a few moments continuance."

Various remedies being tried without benefit, the lady was sent to Philadelphia.

Dr. Physick immediately suspected the cause of the disease, and, on examining the throat, he found an elongation of the uvula. The excision was performed, "immediately after which all the symptoms entirely ceased, and have not since returned in the slightest degree."

Dr. Physick was formerly in the habit of using scissors for the removal of elongated uvula, but has recently invented an instrument which renders the operation more easy. We cannot describe this instrument in words.

54. PURITY OF SULPHATE OF QUININE.

The importance of this medicine is now universally acknowledged; but unfortunately, its great price presents perpetual temptation to adulteration: Detection is our only remedy—for if we trust to men's honesty, we shall lean on a broken reed. The following rules for ascertaining the purity or the adulteration of this invaluable medicinal agent, have been published in a recent number of the *Philosophical Magazine*, by Mr. R. Phillips.

"Pure sulphate of quina has the form of minute fibrous crystals, it is inodorous, and its taste is bitter. If certain vegetable products, such as starch or sugar, be mechanically mixed with it, they may possibly be observed by merely inspecting the preparation with a glass.

1st. If the sulphate of quina be mixed with a considerable proportion of foreign matter it may probably be detected by dissolving the salt in question in about three hundred times its weight of water,—say one grain in about five fluid drachms of boiling distilled water. On cooling, pure sulphate of quina will be deposited in feathery crystals in twenty-four hours, if there be no adulteration.

2dly. As indirect, but as good collateral evidence, the taste of sulphate of quina of known good quality may be compared with that of another sample. Thus, when pure, a grain of sulphate of quina will render nearly a pound and a half of water, or 10,500 grains, sensibly bitter.

3dly. The alkalies, either pure or their carbonates, if but slightly in excess, always occasion precipitation at ordinary temperatures in a solution of sulphate of quina containing only 1-1000dth of its

weight, or less than one grain in two fluid ounces of water.

4thly. A solution of tannin occasions a very sensible precipitate in an aqueous solution of sulphate of quina, containing only 1-10,000dth of its weight of the salt, provided there be no acid in excess. Kino is that form of tannin which best answers the purpose. It is however to be observed, that the salts of morphia, cinchonia, strychnia, &c. are similarly affected by tannin; but they are not likely to be mixed with sulphate of quina.

"5thly. Sulphate of quina suspected to contain sugar, gum, or other substances soluble in cold water, may be tried by digesting the same portion of the salt in small and successive portions of water to saturation. If the sulphate of quina be pure, and the solutions all properly saturated, they will have the same taste and specific gravity; and similar portions will yield, by evaporation, equal quantities of solid residuum.

6thly. A repetition of the above process, substituting alcohol for water, answers for extracting resin and some other substances, because sulphate of quina is soluble in alcohol to only a limited extent.

7thly. If a white substance insoluble in cold water be found in the sulphate of quina, heat the mixture to about 170° of Fahrenheit. This will render starch soluble, and its presence may be determined by the addition of an aqueous solution of iodine, which will immediately occasion a blue colour, and eventually a blue precipitate. The iodine should be added in very small quantity.

8thly. Sulphate of quina has been adulterated with ammoniacal salts. These are rendered obvious by adding a little of the suspected salt to a solution of potash. If any ammoniacal salt be present, ammoniacal gas will be readily detected, either by the smell, or by holding over the mixture a piece of turmeric paper, or a bit of glass moistened with acetic acid.

9thly. To ascertain whether sulphate of quina contains any earthy salts, such as sulphate of magnesia or sulphate of lime; burn a portion of it in a silver or platina crucible, or even in a clean tobacco-pipe. Any earthy salt, or any matter indestructible by heat, will of course remain in the vessel.

10thly. To ascertain that the sulphate

of quina contains the proper quantity of sulphuric acid and quina, dissolve a little in pure muriatic or nitric acid, and add a solution of muriate or nitrate of barytes: 60 parts should give about 17.3 to 17.4 of sulphate of barytes; or the method may be varied without the trouble of drying the precipitate. Dissolve 60 grains of sulphate of quina in water slightly acidulated with muriatic or nitric acid; add a solution of 18 grains of nitrate of barytes, and separate the precipitated sulphate of barytes by filtering. If nitrate of barytes be now added to the clear solution, it should still occasion slight precipitation, for 60 of sulphate of quina contain 5.8 gr. of sulphuric acid, equivalent to 19.1 of nitrate of barytes.

This test is only to determine that there is no crystallized vegetable matter uncombined with sulphuric acid in the sulphate of quina; the detection of earthy or alkaline sulphates has already been provided for.

11thly. Sulphate of quina should lose not more than from 8 to 10 per cent. of water by being heated till deprived of its water of crystallization. Mr. Barry informs me that he once examined a sample which contained more than 40 per cent. of water in excess diffused through it."

P.S. LIQUOR OPII ACETATIS.—The following formula is given by Mr. Houlton for preparing a solution of opium, equal, if not superior, to the black-drop, and other secret preparations of the same medicine. Five minims of the solution are said to be equal to a grain of opium.

Take of Beaufoy's strong acid 3j.
Distilled water . . 3ix.
Opium . . . 3ijss.

Macerate with a gentle heat for five days, and strain.—MED. REPOS.

65. LOBELIA INFLATA—CURE FOR ASTHMA.

This herb grows plentifully in all parts of the United States, and the American physicians consider it as yielding to no plant in powerful and unequivocal operation on the human frame. It possesses emetic, sudorific, and great expectorant

properties. We are informed by Dr. Barton, in his "Vegetable Materia Medica of the United States," that the lobelia is chiefly remarkable for its emetic qualities, emptying the stomach vehemently and speedily—producing, however, great relaxation, debility, and perspiration. Spasmodic asthma, whooping-cough, and spasmodic croup, are the diseases in which the American practitioners have found it most useful. From the activity of this medicine—or, in other words, its powerful poisonous qualities, it should be given with caution, and in the doses to be presently described.

Dr. John Andrew has introduced this medicine to the attention of the British profession, through the medium of our Glasgow contemporary, for May of the present year, and the manner in which he first became acquainted with its anti-asthmatic properties is rather singular. Being in a steam boat on one of the lakes of Scotland, a man was seized with a violent paroxysm of asthma just as the vessel got under weigh. The Doctor was on board—but he had no medicines—and as the doctor is always expected to do something, whether he have drugs or not in his possession, some warm gin-toddy was exhibited, but it only produced momentary relief. At this juncture, a gentleman on board, who had himself suffered from asthma, offered Dr. A. some tincture, which he assured him would give relief to the poor man. A tea-spoonful was given every 20 minutes—"and, in less than 40 minutes, the poor fellow was relieved from the distressing paroxysms." The American gentleman now showed him the prescription, which ran thus:—*R. Fol. lobelia inflatae, 3ijss. Alcohol. dilut. O.j. Digere per dies quatuordecim et cola.* The gentleman above-mentioned made Dr. Andrew a present of some of the plant, which he formed into tincture according to the above formula, and has now been enabled to give the medicine a fair trial. He is convinced that it is of great use in asthma. He has exhibited it in the worst forms of pertussis "with decided advantage—in all relieving, and with the exception of one, curing the disease." "There is no medicine with which I am acquainted that so effectually relieves the bronchial vessels of their viscid mucus as the lobelia." The tincture made according to the above form is stronger than that received from the American gentleman, and should be given in

does not exceeding 30 or 40 minims every twenty minutes. Dr. A. has given some of the plant to Mr. Macleod, of Argyll Street, (Glasgow) who can supply medical gentlemen with the tincture.

56. ON THE SECALE CORNUTUM, OR ERGOT. By DR. DEWEES, Professor of Midwifery in the University of Pennsylvania.

As few obstetrical practitioners can have had such ample experience in the exhibition of this remarkable medicinal agent as Dr. Dewees, we deem it right to make his opinions as widely known as possible in this country. This distinguished Professor has favoured his brethren with an interesting paper on this subject in the second Number of the American Journal of Medical Sciences, (Feb. 1828) from which the following particulars are condensed.

Dr. D. conceives that the action of the ergot on the uterus is different from that of other stimuli, such as opium, oil of cinnamon, volatile alkali, &c.—or the mechanical stimulus of instruments or the hand. These may rouse the alternate contractions of the uterus into temporary, and sometimes successful action; but the tonic, or more permanent contraction does not remain with any degree of certainty. The ergot, on the other hand, effects an increase of tone in the intervals between the pains, as well as increases the paroxysmal pains themselves. The promptitude of its action is another peculiarity. If it do not manifest an influence in 20 minutes, or half an hour, it utterly fails. Its success is generally in proportion to its promptitude. By many, this sudden action has been attributed to coincidence, rather than the effect of the remedy. This may occasionally be the case; but Dr. D. conceives he can readily distinguish the effect of the ergot from the natural efforts of the uterus, by the following signs.

“When ergot has been administered with success, we find the uterine effort not only more quickly repeated, and more powerfully exerted, but these efforts are accompanied with less suffering, than the same apparent exertions of this organ, where not urged by this drug. The wo-

man, when interrogated with respect to her feelings, expresses her sensations by saying she feels “as if every thing were forcing from her;” but at the same time admits, that the pains have not the same character with those she suffered before: indeed it very frequently happens, that there is a great abatement of suffering, by converting a concentrated pain, and this most frequently in the back, to a more generally diffused one over the abdomen; or by obliging the back to participate if the abdomen has been the particular seat of it. At the same time it must be confessed, that the intervals between the contractions are more uncomfortable, as an almost constant *nismus* is kept up by the excited, or rather, it would seem, the goaded uterus, though the sensation does not amount to pain. Now the presence of the circumstances just noticed, constitutes the peculiarity of the action of the secale cornutum.”

Dr. D affirms that he has “the most firm reliance on the powers of the ergot.” He generally administers it in substance, in the dose of 20 grains powdered. He does not believe it will retain its medicinal properties more than a year. It should be kept in a well stopped bottle, and powdered only when wanted. He believes there is no well-authenticated case on record, where the ergot has done mischief to the child. Dr. D. criticises the paper of Dr. Henry Davies, on this subject, and lays down the following rules for the exhibition of the medicine.

“1st. It should never be given before the membranes are ruptured, the os uteri dilated, and the external parts disposed to yield.

“2d. It must not be used so long as the natural pains are efficient, and competent to the end.

“3d. But should they flag, from any cause, it may be given; provided the labour be a natural labour according to our acceptance of the term ‘natural labour;’ that is, when the head, (if well situated,) the breech, the feet, or the knees, present. For, independently of any accident which may complicate the labour, it is sometimes desirable, for the safety of the child, to hasten it when the natural powers are incompetent to this end.

“4th. And if the labour be accompanied by any such accident as flooding,

convulsions, syncope, &c. it may sometimes be employed to great advantage, provided rules 1 and 2 are not violated.

"5th. It may be used very often with much advantage in every kind of premature labour; and at full time, when the placenta is not thrown off, and the uterus is found in a state of atony.

"6th. Where flooding takes place after the rupture of the membranes; the os uteri well dilated; the pains feeble, but the child well situated.

"7th. Where the head of the child has been left in the uterus by being separated from its body.

"8th. Where the uterus is painfully distended by coagula."

Dr. D. is against the exhibition of the ergot, in cases of placental presentations, considering that there is no security against hæmorrhage, except by early delivery. He has derived much advantage from a grain of the ergot given three times a day, in cases of mænorrhagia, where the long continuance of the disease, rather than the immediate excess of the quantity discharged, rendered it important to arrest the flow.

57. INSTANCE OF OBLITERATION OF THE AORTA OPPOSITE THE FOURTH DORSAL VERTEBRA. By PROFESSOR MECKEL.

A Peasant, aged 35 years, previously in good health, robust, and well-made, was, all at once, on the 18th January, seized with a sense of great debility, while carrying a sack of grain to market. He was carried to the hospital immediately. The symptoms of syncope and vertigo were dissipated in a few hours; to which succeeded gastric irritability, pain in the chest, total loss of appetite, bilious vomiting, the pulse remaining little altered. By the 6th day, the patient appeared to be completely cured—got up—and was walking about—but suddenly fell down dead.

Dissection. On opening the thorax, the pericardium was observed to be filled with black blood, occasioned by rupture of the right auricle, which was softened in its structure. The aorta ascendens was found to be too much dilated for in-

jection from that point—and, therefore, ligatures were thrown on the left subclavian and carotid arteries, while the tube was fixed in the arteria innominata. The injection was considered to be unsuccessful, and as the subject had been designed for a demonstration, it was thrown aside. On opening the abdomen, afterwards, the vessels were seen injected, as were those of the lower extremities down to the feet. The examination being prosecuted, they found the aorta, immediately below the arterial ligament, reduced to the size of a crow-quill, while a beautiful net-work of vessels was seen between the trunks, going off from the arch of the aorta, and the intercostals of the aorta descendens. The said intercostals were very much enlarged, and had produced grooves in the ribs. From this circumstance it was inferred, that the obliteration of the aorta was an affection of long standing, and could not possibly have dated from the late attack of syncope, six days previously. The man must, therefore, have, not only survived the cause of the obliteration, whatever it was, but lived in good health for many years afterwards. On inquiry, all that could be learnt, was, that this man had been very often ill in his youth; but afterwards had grown up strong and muscular.—*Journal Complémentaire.*

MR. SYME'S CASE.

When on the subject of obliteration of arteries, we may here notice a case recently published by Mr. Syme. An unhealthy man, aged 58, had been seized with mortification in the left leg, without any apparent cause, and where nothing but amputation appeared to present any chance of success. The limb was removed above the knee, and, on examination, the popliteal artery was found firmly obstructed by a dense white coagulum, like that lining old aneurisms, and this obstruction continued all the way to its division into the peroneal and tibial arteries, which were also obstructed to the extent of an inch and a half from their origin, beyond which point they were healthy. The obstructed vessel seemed also to be somewhat contracted, particularly about the middle of the popliteal portion, where its coats were thickened. The vein was much thickened, so as to resemble an artery, but not obstructed. The man did well

for some days, and half the stump was healed. But the breathing became oppressed, and he died. On dissection, the heart was found so soft and flabby, that the fingers could be easily pushed through its substance. The *right* internal iliac artery was firmly obstructed from its origin, as were the right and left internal iliac veins. Mr. Syme's opinion of the case is, that it was one of acute inflammation of the arteries, similar to the one recorded by Mr. Hodgson.

discharged. Thirty-six hours afterwards the patient died. On dissection, a vast abscess was discovered, beneath the peritoneum, and extending from the kidney to the crural arch of that side. M. Guibert thinks that this suppuration was occasioned by the pressure of hardened feces in the sigmoid flexure of the colon, and in the rectum.

58. ACCUMULATION OF FÆCES IN THE LARGE INTESTINE.

We believe that there is much more mischief produced by the retention of stercoraceous matters in the colon and rectum than is generally supposed. M. Guibert has recently reported a case to the Royal Academy of Medicine, which bears on this subject. A pregnant female experienced a fall, and the succussion was received on the right side of the abdomen. This accident was succeeded by pain, and a sense of weight in the pelvis of that side. An inflammation and abscess now took place in the right mamma, accompanied with considerable fever, during which a premature delivery took place. The fever continued after delivery, with obstinate constipation. In the course of a month, however, she seemed to be in convalescence, but this was of short duration. She again complained of weight and pain in the lower part of the abdomen, accompanied by tenesmus. As lavements were found to go up pretty freely, no suspicion was entertained of any obstruction in the rectum or colon. The symptoms were attributed to internal hæmorrhoids, and leeches were applied to the anus, with oily aperients, and milk diet. But a slow fever continued, with pains in the abdomen, frequent tenesmus, and discharge of considerable quantities of liquid stercoraceous matters. M. Guibert now examined the rectum, and found it blocked up by a mass of hardened feces, which he extracted, not without much pain to the patient. This was followed by such relief, that hopes of recovery were entertained. But an abscess pointed in the region of the right iliac fossa, which was opened, and a quantity of matter

59. PATHOLOGICAL OBSERVATIONS.

Dr. Horner, who must be favourably known to our readers, has introduced a few remarks on certain points of pathology, in a recent number of our very esteemed transatlantic cotemporary, (*American Journal of the Medical Sciences*), from which we shall make one or two short extracts in the present article.

Dr. H. observes that, on pushing a fine injection into the arteries, he has repeatedly filled the whole venous system, so as to display all the fine meshes under the skia, and to infiltrate the body completely. Judging from these experiments, he is disposed to think "that some of the phenomena of inflammation arise mechanically, and that the substance effused from vessels is, in a measure, according to the mass and momentum of blood flowing through them."

"Thus when irritation determines an increased afflux of blood to a part, if the calibres of vessels are not large enough to permit it to pass freely from the arteries into the veins, serous infiltration first of all occurs: if the afflux be augmented, then coagulating lymph, the particles of which are larger, is effused; and if there be a further augmentation of afflux, the red particles of blood are then effused through the lateral porosities of the vessels. The corresponding phenomena in fine injections, are, first the water, then the size, and lastly the colouring matter, from its particles being the coarsest of the mixture.

"Though many dropsical effusions may be traced to irritation, yet I am disposed to think that some very great errors have been incorporated with their pathology from the desire to adapt all the phenomena to one standard, to wit, inflammation. This at least I knew, that in fine injections of whole adult dropsical sub-

jeats, no resistance scarcely is offered by the blood-vessels, and that the injected fluid escapes from them by their lateral parietes or porosities, as fast as it can be thrown in; manifesting thereby evidently a great laxity in their texture. This escape is generally in the order in which we see dropsies to occur, first in the ankles and feet, then up the lower extremities to the trunk; in the hands and wrist, and then up the pectoral extremities to the thorax."

It will be in the recollection of many gentlemen, and indeed in that of our readers, that a physician of this metropolis, maintained, in the Medico Chirurgical Society, that ABSCESS OF THE LUNGS was a common occurrence. Let us hear what Dr. Horner, who has the most ample means of prosecuting *post mortem* researches, in the Philadelphia Alm's-house, says on this subject.

"It is owing to the blood-vessels of the lungs being so superficial, that, as in the intestines, their inflammations pass off either by an increase of their natural secretion of mucus, or by the effusion of serum and of blood. LAENNEC has said, (vol. i. p. 116,) that a collection of pus in the pulmonary tissue in consequence of inflammation, is one of the rarest of cases, at least it is one hundred times more rare than a vomica from tuberculous matter, and a thousand times more so than empyema. In all the dissections of lungs that I have made, *I have met with it but once*, and that lately, (June 29th, 1827,) at the Alms-house in which case the surrounding part of the lung was gangrenous."

We leave the physician above-mentioned to ponder on these testimonies; and we are inclined to think that he will be more cautious, in future, how he opposes, by an *ipse dixit*, the laborious investigations of those who are in pursuit of science and truth.

60. LONG RESIDENCE OF A BULLET IN THE SKULL.

Baron Larrey lately presented to the Royal Academy of Surgery the cranium of a soldier, who died of phthisis a few weeks previously. This man received a musket bullet in the forehead, a little

above the left eye, in the battle of Waterloo. He fell senseless on the ground, and there he remained, without any assistance, for the space of 48 hours. He was then discovered to be alive, and carried to the hospital at Brussels. Various efforts were made to extract the ball, but without success. It appeared to be lodged in the bone, half within and half without the cranium. There were evident symptoms of compression, including paralysis of the right side of the body. Bleeding and the antiphlogistic regimen were rigidly enforced; in process of time the symptoms were mitigated, and he so far recovered as to be sent to Paris. There he got so well as to resume his military duties, and died at last of phthisis, the ball still lodged in the cranium. The only phenomenon that remained, as a consequence of the wound, was the loss of memory in respect to proper names, and the names of nouns substantive. The ball is still seen lodged in the bone, partly within and partly without the cranium. The inner table of the skull had evidently been fractured into several pieces.

61. STETHOSCOPE.

Under this head, "one of the New School," has attempted, in the 14th number of the Gazette, to turn into ridicule the investigation of diseases by means of auscultation. The anti-auscultators (and he as the principal) have been beaten out of the field by fair argument—and now, as a "dernier resort," they have recourse to *anonymous* ridicule! The game is up with the anti-auscultators; and we venture to predict, that not a single individual, in this country, will ever attempt to impugn the measure, affixing his real name to the document. Much do we regret, that a cotemporary, whom we esteem, should have given insertion to an anonymous paper tending to retard the advance of a science which needs every auxiliary to rescue it from the reproach of empiricism! To arguments, or even satire, with a responsible signature, every journalist has a right to give currency; but we question the right, or at all events, the propriety, of putting *anonymous* dealers in ridicule on so respectable a footing.

62. PURPURA HÆMORRAGICA TREATED
BY VENESECTION.

A case of this kind has recently been reported from Bartholomew's Hospital, which shows the inflammatory nature of this mysterious disease—at least in some instances.

A man, 37 years of age, was admitted under Dr. Latham, having every part of the body sprinkled over with purpurous spots—the gums livid, spongy, and oozing, blood—the whole tongue livid, and half of it presenting the appearance of a “large, black, bleeding fungus” shooting from its surface, the inner surface of the cheeks presenting similar phenomena.* The countenance was sallow—the eyes tinged with bile—blood, and nothing but blood, passing by stool. Yet the patient felt strong—had an appetite greater than natural—the urine was free from blood, and the body exhaled a fetid odour. Under these circumstances Dr. Latham had him bled to fifteen ounces—the blood exhibiting a prodigious buffy coat. He was kept on water gruel—had a few doses of aperient medicine containing calomel or the hydrargyrus cum creta, under which treatment, the purpura and hæmorrhage gradually subsided, and the patient recovered. During convalescence he required active purgation, and the use of brisk purgatives to check the inflammatory diathesis and obviate constipation of the bowels.

63. DANDY FEVER.

A most extraordinary epidemic, or influenza, under the above ludicrous name,

* We have several times had opportunities of ascertaining that these appearances are produced by the coagulable lymph of the blood that has oozed from the vessels and formed itself into these crusts, which tenaciously adhere to the parts. They may be removed by a blunt knife, when the surface beneath will be found unbroken. These phenomena always indicate an inflammatory diathesis and sily blood. Whenever they present themselves, venesection may be safely employed.—Ed.

has lately pervaded almost the whole of the West Indian Islands. Whenever it entered a house, no individual in that house escaped. The peculiarity of this epidemic consisted in the fever being always accompanied or succeeded by most severe rheumatic pains in various parts of the body, which threw the patients into such *contortions*, that the name of DANDY fever was applied to it. We believe that few deaths were occasioned by the epidemic, but an immense amount of suffering has been entailed on those who caught the influenza. We this day saw an officer who became affected with the fever two days after sailing from Jamaica. The fever lasted only two or three days, but the rheumatic pains, in various parts of his body and extremities, have continued to harass him day and night, and are rather on the increase since he landed in England. The sheaths of the tendons of his hands have evidently experienced rheumatic inflammation, and effusions have taken place resembling irregularly shaped ganglions. We shall be anxious to have some details of this remarkable epidemic. That it was produced by some atmospheric impregnation there can be little or no doubt—and if so, it strongly supports the doctrine now advocated by Dr. Macculloch, that rheumatic as well as other fevers (not contagious) are the products of malaria.

64. TREPPIING—PUNCTURE OF THE
DURA MATER.

In a long and very important paper, on Injuries of the Head, lately read at the Medico-Chirurgical Society from the pen of Mr. Brodie, the following, among many other interesting cases, was related.

A woman fell down into a cellar in Monmouth-street, and pitched on her head. She lay senseless and apparently in profound coma or apoplexy. Mr. Ogle, of Great Russel-street was summoned, and examined the head, after it was shaved, with great care, but could discover no mark of fracture or other injury. When pressure, however, was made on a particular portion of one of the parietal bones, the patient appeared to evince some signs of sensibility. After employing the usual means, and waiting a rea-

conable time, without symptoms of returning sensibility, Mr. Ogle determined to apply the trephine over the part above-mentioned. A portion of bone being removed, the dura mater, of a blue colour, bulged out, and was soon on a level with the external surface of the surrounding bone. The sense of touch convinced Mr. Ogle that there was blood effused under the dura mater. He, therefore, punctured this membrane, and blood immediately spouted forth. The patient almost immediately recovered sensibility, and eagerly demanded "what they were about." She recovered.

Mr. Brodie considers it a dangerous practice to puncture the dura mater; but he thinks that such extreme and dangerous cases as that just detailed, warrant the occasional adoption of such a measure.

65. MIDWIFERY. VERBUM SAT.

Dr. King of Glasgow, has recently published, through the medium of our northern cotemporary, some cases in midwifery, which are by no means devoid of interest. We are unable, however, to notice these cases at present. The following extract will show Dr. King's sentiments respecting the projected "return to nature," as we have heard it called—namely, the re-employment of women in midwifery, instead of men. After alluding to the insinuation, or rather the assertion, that great immorality is concealed and committed in the practice of man-midwifery, Dr. King remarks:—

"But the good intentions of our author do not end with this prohibitory caution. Having told the ladies of all the bad consequences to be dreaded from any intercourse with men-midwives, and yet being more than half convinced that children must be assisted into the world somehow or other, he proposes to remove all danger to their morals by educating a generation of young women in whose hands their characters at least shall be perfectly safe. But there should be consistency in every thing. Does he not shudder at the risk to which he will expose his future midwives? Poor innocent women! little can they know, till too late, the misery for which he destines them; for before they can practise, it is plain that they

must be educated, and to acquire the necessary knowledge—under whose care does he intend to place them? Why under the care of the very libertines, whose touch, according to his own showing, is contamination. Unhappy creatures! long before they are fit to serve the public, they must practice on one another, or take refuge in the Magdalene. Reformers have abounded in every age and country; and Horace probably alluded to some of the fraternity, when he said—

'Si quis nunc querat; Quo res hæc pertinet?
illuc;
Dum vitant stulti vitia, in contraria currunt.'

The following language is much too strong, as applied to the indiscreet—we might almost say *multiform*, letter of a modern advocate for female accoucheurs. But it is so peculiarly applicable in *another* quarter, that we believe there is not a single member of the profession in this country, however astute his comprehension, who will not instantly recognize the *applicability*.

"But calumny of this kind can only be answered in one way. We must 'live it down,' and the morality of the profession must be read in the private history of its members. *Society is not hoodwinked*. If *Tartuffe* appear, he will *sooner or later be detected*, and his consequent disgrace and ruin will be so complete, that he must be a reckless rogue and a bold one, that would run every risk against such fearful odds. '*Le jeu ne vaut pas la chandelle*.'

66. PROTRACTED SLEEP FROM CONCUSSION.

A gentleman (we believe it was Mr. Wigan) lately stated two remarkable instances of this kind, in the Medico-Chirurgical Society. The first case was that of a boy, who, while walking along the street, struck his head against a long pole, which another person was carrying. He was stunned and carried home insensible. Two or three medical men were summoned, and a violent dispute arose about the proper treatment that was to be pursued—some recommending venesection, others stimulants. The father overheard the altercations, and soon settled the question by turning the doctors to the right about, and determining to leave the case to Nature.

The boy lay as in a profound sleep for seventeen days, during which he was nourished by injections of broth, and some beef-tea got down his throat with difficulty. At the expiration of this period, the boy awoke, unconscious of what had passed, and without a single morbid symptom.

A nearly similar case happening to occur soon afterwards, the gentleman was induced, from recollection of the former instance, to recommend the Hippocratic practice. In this case the patient continued *three weeks* in a state of profound sleep, and then recovered, without any bad symptom.

67. INJURY RECEIVED IN DISSECTION, WITHOUT THE OPERATOR BEING WOUNDED. By SIR ASTLEY COOPER.

The terrible consequences that have resulted from wounds received on dissection are too well known to require notice here, but it is not generally known that distressing effects are sometimes produced without any wound or abrasion upon the hands of the operator. Sir Astley Cooper says "It would seem that under certain circumstances a poison is produced sufficiently strong to excite inflammation, even when there is no wound," and he relates the following case:—

"Mr. Cook, surgeon, at Marsh-gate, Westminster Bridge, sent to me whilst labouring under the highest irritative fever, in consequence of having opened the body of a person who had died of puerperal fever. When I examined him, I found the extremities of his fingers of both hands inflamed, as if they had been dipped in scalding water, and the absorbents of his arms red, hard, and knotted to the axilla; yet he had not any wound or abrasion of any kind upon his hands, and it would therefore seem that the fluid produced in the abdomen of this woman, in which his fingers had been frequently immersed was of a highly stimulating nature."—*Lectures on Surgery, Vol. III.*

M. Bégin relates a somewhat similar case. We think this case offers incontestable proof that there is a poison generated in the dead body, and that all does

not depend on mal-habit of the dissector, as has been maintained.—*Ed.*

68. ROYAL EXCHANGE OF IDEAS.

In the 2nd CONVERSAZIONE at the ROYAL COLLEGE OF PHYSICIANS, Dr. Macmichael was kind enough to entertain and instruct the numerous assemblage by a paper on vaccination, in which a rapid outline of the history, not only of this, but of inoculation, was introduced. The paper was not badly calculated to produce the EFFECT which was desirable on such an occasion. Lady Montague's letters still afforded some amusement, especially those passages in which she doubted the practicability of introducing inoculation in England, for want of a philanthropic physician, who might prefer the good of society to his own private emolument. This was the ARGUMENTUM AD HOMINEM as every one in the assembly felt conscious how much her Ladyship had mistaken the medical character. Instead of experiencing any difficulty in finding a *disinterested* physician in the present day, it would be extremely difficult to point out a single instance where the public good is not unequivocally preferred to self-interest! The consciousness of this *fact*, we say, put the whole company in the best possible humour; and this pleasant state of feeling was not diminished by the announcement of another *fact* which beautifully illustrated the philosophical doctrine, that "out of evil cometh good"—or the doctrine of Bernardine de Saint Pierre, that—"all contrasts produce harmonies." We shall not stop to illustrate these delightful views of human nature and human affairs, but proceed at once to the case in point. Dr. M. read an extract of a letter from some "Wise Men in the East," who were led, on failure of vaccine matter, to institute certain experiments, "by which it has been discovered that, by inoculating a cow with small-pox matter from the human body, *fine active vaccine virus* is produced." We agree with our esteemed cotemporary, the MEDICAL GAZETTE, that, if this should be true—"there can no longer be any fear that we may, at any time, be deprived of the means of combating the small-pox, since that baneful contagion will furnish its own antidote." It is with extreme reluctance that we venture to disturb the train of pleasing anticipations which must naturally flow from this discovery. But we are compelled to remind Dr. Macmichael that this same experi-

ment has been repeatedly tried in this country—for instance, at the Veterinary College, and without the slightest indication of success.

We again congratulate the profession on the establishment of these *Conversazioni*, which bid fair to re-establish harmony in medical society. Had we an Addison or a Steele in our degenerate times, these immense congregations of the *OPIFFERI*, *SALUTIFERI*, and *LETHIFERI* of the day, would furnish many an amusing lucubration for—*SPECTATORS* and *TATTLERS*! Where are those modern alchemists, the *nimble-fingered* tribe, who can *steal* the words out of our mouths—

“*Calidum, quicquid placuit, jocosum
condere furto*”—

who can transmute, with the rapidity of lightning, imponderable thought into massive gold? Here is a field for their industry, the like of which was never before laid open to cultivation. Not a subject in the wide domain of medical science and literature that is not here discussed from the sublime investigations of phrenology, down to the minutest researches in therapeutics—from bumps on the head, to bunions on the toes—from the *composition* of the mind, to the composition of a corn-plaster—from physic to physics—and from physics to metaphysics—all branches and parts have their respective representatives and professors in these peripatetic or intellectual BAZAARS. Is Wakly gone to sleep under the *shadow* of his fig-tree? Does he think that Dr. Blundell's lectures will never have an end—or, if endless in themselves, will they not be the end of his readers? Can Mister Wakly not get some good-natured FELLOW to enter a reporter at the College, under the disguise of a LICENTIATE? The price of the licence will be repaid fifty-fold before the season is over.

Should the PRESIDENT frown, or the CENSORS threaten, it will be all in vain. They will find themselves in the same predicament, as did Mr. Abernethy, when the MODERN MERCURY stole his lectures—or, as did Apollo, when the ELDER MERCURY stole his bullocks!

*Te boves olim nisi reddidisses
Per dolem amotas, puerum menaci
Voce dum terret, viduus pharetra
Resit Apollo.*

By the way, we clearly recognised the GOLD-HEADED CANE in the midst of the crowd, artfully *disguised*—having changed its profusion of *golden* tresses for sparse and *silvery* locks. The next edition of its Memoirs will, no doubt, be greatly enriched by the anecdotes which it will be enabled to pick up in the peripatetic BAZAAR.

A curious and somewhat alarming phenomenon occurred soon after ten o'clock in the last *Conversazione* at the College. In the midst of the intellectual exchange—when transfers were extremely brisk—and when (to use the language of another Royal Exchange) there was great “*ELASTICITY*” in the market, the lights were observed suddenly to “burn blue,” and in a very few minutes, they were so nearly extinguished, that the company could scarcely recognize each other! A portion of the visitors made a scramble for their hats, and decamped with great rapidity; but the more philosophic party imitated Pliny, and determined to see the end of this strange phenomenon. All wits, as well as “all the talents,” were instantly at work on the ETIOLOGY of this sudden obfuscation. Was it a “broad hint” to make themselves scarce? This could not be; for—“their hour was not yet come.” Was it typical or emblematical of the *times* we live in, and of the mental adumbration which has spread over the medical horizon during the last three or four years? No. Was it some LICENTIOUS, but discontented wag, who had bribed the turn-cock, and was playing off a trick on the College? This theory was held to be probable—but a more general opinion prevailed, that, the INDEPENDENTS were at work—and that either Dr. Harrison, or, “a BLAST from the north,” was cutting off the supply of hydrogen gas from the College. Just as darkness was becoming visible, and a general gloom was pervading every countenance, a flood of ignition burst from every tube of the magnificent chandeliers—and all again was harmony and enlightened conversation! The phenomenon has not yet been accounted for; but a writ of TROVER, will no doubt, be sued out, in order to discover the author of this dark conspiracy.

69. GASTROLOGY—CORNARO—LONGEVITY.

There are three important personages in this world, who are in daily and hourly request by all classes of society—the cook, the doctor, and the undertaker. We have put the cook at the *top* of the list; for although he and the undertaker carry on many of their grand operations *underground*, while the doctor moves in higher circles, yet as we love to trace things to their sources—and as we believe the cook to be full as much the cause of the doctor as the doctor is the cause of the undertaker, so we have constructed the order of precedence in the above manner. Perhaps a secret motive may have influenced us, also, on this occasion. It is not to be concealed, though with shame we state it, that the doctor, forgetting that he owes his very existence to the cook, has lately endeavoured to take the trade out of his benefactor's hands, and thus monopolise both branches of the profession. Whether the public are to be gainers by the doctors turning cooks, we shall not attempt to decide. It is probable that if the undertaker set up the trade of physic in conjunction with his own—that is, if he open a shop for the sale of drugs next door to that where he manufactured coffins, people would be rather shy in *going* to the former, lest they should be *carried* to the latter. That there was a time when the faculty knew their own interest better than to quarrel with the cooks, is made evident by that sagacious and facetious medical historian, Mr. Wadd. He informs us that a celebrated modern physician always accosted the cooks of his patients in the following terms: "My good friends, accept my best thanks for all the kind services you render us physicians. Were it not for you and your pleasing poisons, the faculty would soon find themselves inhabitants of the work-house."*

Since that period, the said faculty have made war on the cooks, in two formidable columns—the one headed by Drs. Kitchener and Paris, who took possession, at once, of the stew-pans and gridirons, warning the public against swallowing

any thing that was not *prepared* according to the analytical and synthetical *formule* which they had devised. This was bad enough; for the doctor was thenceforth *MAITRE DE CUISINE*, and the cook reduced to a *sub.* Still he had something to do under the direction of his superior officer. But Messrs. Abernethy and Johnson nearly completed his ruin. They strenuously advised the public to *live without food, or nearly so*—and, as a necessary consequence, to discharge the cook!

It is said, we believe, in Holy Writ, that it is not that which goeth *into* the mouth that defileth the soul. Modern sceptics have questioned this dogma—and none more resolutely than Mr. Abernethy. He tells, and tells us truly, that "there is a direct communication (perhaps association would have been a better word) between the stomach and cerebrum—and that the disordered state of the one will produce a like state in the other."

"Suppose a man is a glutton, and overcharges his stomach with all the cursed mixtures which a vitiated appetite can invent, what can he expect but the constant production of an irritable material, from the fermentation of the vegetable matter, and from the animal matter becoming rancid? The product is quite sufficient to account for all the train of evils which are sure to happen to the nervous system."

"When patients apply to me," says Mr. A. "and I see that their complaints are chiefly of the nature I have been describing, I tell them that *I am no physician; and I offend them stoutly*, when I tell them that they have their health in their own keeping." If a man were to live like Cornaro, Mr. A. assures us that "he would be rewarded for it by a *long and happy life*." That many people would lead a more *happy* life than they do, if they adopted the system of Cornaro, we have no doubt; but that the general range of human existence would be materially *prolonged* thereby, we have much doubt. Individual constitutions differ so much, that Cornaro's quantum of *twelve ounces* of food in the 24 hours would kill as many as it would cure. The single instance of Cornaro's longevity proves nothing. Fifty instances might be adduced, where drunkards and gluttons arrived at a very old age. Farr was

* Comments on Corpulency.

by no means a very abstemious man, and yet he lived to the age of 144 years. The rule which a sane medical philosophy should lay down for diet, does not consist in the number of ounces which a man ought to eat; but in the quantity which he can digest, without inconvenience to the health. It would, therefore, be very beneficial to patient and practitioner, if the signs or criteria of too much or too little ingestion were carefully investigated, rather than the attempt to fix a determinate quantum of food for all people—an attempt as futile as that of laying down the exact length of men's shoes. The shoe which would cripple one man, by the growth of corns, would fall off another man's foot, from its largeness, while crossing the streets, among carriages and equestrians! So it is with food. The quantity which would make one man uncomfortable for many hours after dinner, would scarcely fill the corner of another man's stomach, and would render him a walking—perhaps a hanging skeleton in six months.

"The diet, (says Mr. A.) I have taken the liberty to recommend to the public is Cornaro's, with a few conundrums of my own, as Dr. Franklin says.* I do not pretend to have adhered to such a diet as Cornaro did. Oh, no! I acknowledge myself to have been a sinner; and I remember once having been living irregularly, and having been taking butter and sauces and sweetmeats, and indulging a pampered appetite, things that turned acid and rancid on my stomach; I was

seized with pain in my bowels and headache, and had a sore throat; and I had a friend of mine, a physician, to look into my throat, and there was a long discussion as to what sort of cynanche it was to be; one said one thing and the second another; but I smiled and said, if you do not know what it is, I know what will cure it; so I took a dose of calomel and jalap, and lived upon toast and water for about ten days, and I got rid of my sore throat and fever together."

We do not dispute the propriety of the talented writer's restricting himself to toast and water during a fever. Perhaps if Mr. Abernethy had been weighed at the commencement and at the end of this period, it would have been found that he had lost at least a dozen of pounds in weight—and consequently his absorbent system was furnishing the general system with a pound of good animal food, or, at all events, animal fat, every day. But we do demur to the following scale of diet and drink which the worthy lecturer has now printed on slips of paper for his patients.

"The RULES OF DIET, IN DYSPYPTIC Cases, may be thus stated in an abbreviated form:—

- "1. The food should be of the most nourishing and readily digestible kind.
- "2. The quantity taken at a meal should not be more than it is probable the stomach will perfectly digest.
- "3. The meals should be taken at regular periods of six hours, three times a day: and when the stomach can digest very little food, they may be taken four times in the twenty-four hours.
- "4. Every meal of food should be reduced to minute sub-division and pulpy consistence by mastication, or otherwise; and suffered to remain in the stomach unmixed with liquids, in expectation that it will be dissolved by the juices of the stomach.
- "5. Drink should be taken four hours after each meal; allowing that time for its perfect digestion, and two hours for the conveyance of liquids from the stomach before the pulpy food be again received.
- "6. The drink then taken should not contain fermentable substances. It should be boiled water; which may be

* "Cornaro was given over by his physicians at the age of thirty-five: he saw that there was not the least chance of recovery, if he continued to swallow the trash they were in the habit of giving him, and that there was no good in putting food into his stomach, if his stomach could not digest it. What did it do there? Why, it played the very devil with Cornaro's guts. 'So,' said he, 'I dropped the plan pursued by my physicians, and adopted a regimen of my own.' The principal beauty of Cornaro's life was the happy state of mind in which his continued temperance preserved him. He limited himself to twelve ounces of food for each day, which was of a nutritious kind, and no inducement could prevail on him to exceed it."—Lecturer.

flavoured with toast, or prevented from producing a qualmish state of stomach, by pouring it upon a trivial quantity of powdered ginger.

"It is not meant by these rules to debar persons from taking a *small teacupful of liquid* with breakfast, or a glass or two of wine with dinner, if it seems to promote the digestion of their food."

It will be obvious that there is a considerable discrepancy between Cornaro's diet, which Mr. A. says he recommends, and that which is in his printed code of instructions. The rule, too, of not drinking till *four hours* after dinner, is equally impracticable and unphilosophical. The sensation of *thirst* is to be attended to, whether at or after dinner. Drink should not be taken when there is no inclination for it: but when Nature calls for liquid, the call of Nature should not be disregarded, whatever may be the hour which the hand of the clock points to at the time.

70. NEW SPECULATIONS ON THE SPLEEN.

Every body knows how many theories have been broached upon the structure and uses of this provoking viscus. We do not, of course, intend to enumerate them here, nor indeed could we, even though like the poet, we were gifted with the

"*Ora centum, ferrea vox.*"

M. Jules Arthraud, however, has put another speculation on the record, and promises to prove what he advances, in a Memoir to be shortly read before the Institute. It appears that M. Stranz, in the year 1817, made some microscopic observations on the spleen of an elephant, which died at the Jardin des Plantes, and was surprised to discover in it none of the distinctive characters of either the fibrous or vascular tissues. This gentleman opened several of the filaments (flets), many of them half a line in diameter, of which the organ was composed, and found them filled with a pulpy substance, precisely similar to that which forms the nerves. From these facts he concluded, in our opinion hastily enough, that the spleen was a large nervous plexus, connected with the ganglionic system! M. Stranz was unable to continue his

speculations, but M. Jules Arthraud pursued them with unabated ardour, and has come to the following conclusions.

1mo. In vertebrated animals, the existence of the spleen is always in connection with that of the nervous system.

2ndo. The spleen in the human foetus does not appear distinctly until the second month of pregnancy, the period at which the ganglionic system is discovered.

3tio. The spleen accompanies the nervous system in all the changes which it undergoes from age, the descent in the scale of the lower animals, and *lustus naturæ*.

4to. In the true cases of acephalous foetuses, the spleen is invariably absent.

5to. The substances which especially stimulate the ganglionic nerves, act strongly on the spleen, which enlarges under their influence.

6to. The tissue of the spleen, which our author calls *nervous*, preserves in a bath of pure water the density it had previously acquired in a mixture of seven parts of water to one of nitric acid, whilst the vessels which enter into its composition, soften and grow putrid.

7to. A number of facts induce our author to lay to the account of alterations in the spleen, an order of intermittent fevers, considered by many excellent practitioners, as belonging to the *neuroses*.

In short M. Arthraud assures us that in his coming Memoir, he will satisfactorily prove that the spleen is nothing but an electrical apparatus, producing certain changes to be hereafter described in the circulating blood. We trust our enthusiastic author will succeed as completely as he anticipates, but, in this particular instance we fear we must be classed amongst the tribe, which Swift, we believe, so sarcastically describes, whose philosophy is—to doubt.—*Journal de Progrès*.

71. SPINAL IRRITATION.

Under this term, for want of a better, Dr. Brown, Senior Physician to the Royal Infirmary of Glasgow, has published, in the second Number of the Glasgow Medical Journal, a very long and by no means uninteresting paper, on a peculiar affection of the spinal nerves, frequently

met with in young females, and sometimes in grown women or even males, which has hitherto, we believe, remained unchronicled by the medical practitioner. The complaint is not generally of a serious nature in itself, but leads to nervous affections of a troublesome character, if long continued. The author warns the reader in limine, against confounding this complaint with certain spinal diseases, as lateral curvature, inflammation of the spine, &c.—diseases with which it may occasionally be complicated. The complaint in question, which our author refers to, “increased irritability of some of the spinal nerves,” will be understood best—at least in its more common form—by the statement of a case.

Case. “Miss C. aged 17 (September 1822), of a robust make, and apparently in good health, for more than a year has complained of pain, situated below the left mamma. This has been fixed to one spot, for nearly the whole time. It is a gnawing bruised feeling, increased materially by fatigue of any kind; and, after fatigue, it is attended with restlessness. It is relieved by reclining in the horizontal posture. It is not sore to the touch. The complaint has been treated by a surgeon in the country as a case of rheumatism. She has been bled and blistered for it, but without any good effect; and at last it has occasioned so much anxiety in the minds of her relations, that she is brought to Glasgow, from a considerable distance, for the benefit of farther medical advice.

“On examining the spine, it is found to be perfectly of the natural shape and appearance; but when pressure is made on it, about the 7th or 8th dorsal vertebra, she complains of a considerable feeling of tenderness, amounting even to pain; and she finds that the uneasy sensation shoots forward exactly to the affected part of the breast. She had not paid any attention to this tender part of the spine; indeed, she had no idea that there was any thing faulty there, till her attention was called to it by the examination.

“After I saw her, she had a dose of physic; 10 leeches were applied to the pained part of the spine, followed afterwards by a small blister; and the horizontal posture was enjoined. She was

nearly free of pain in a few days, and returned home, with directions to repeat the blister, and to avoid fatigue.”

Dr. Brown could bring forward 50 cases of a similar nature, from the Journals of the Lock Hospital, and from his private notes, but deems it unnecessary. He adverts merely to some varieties in those symptoms which attend the disease, when seated, as in the above case, in the lower part of the dorsal vertebrae.

“The site of the pain in the breast varies much. It is needless to mention, that it is occasionally in one side of the chest, occasionally in the other; but I am confident that it is much more frequently in the right than in the left. It is sometimes within a few inches of the spine, but much more frequently it is nearer to the sternum, and occasionally it is immediately under this bone. It is generally described to be a weary or bruised pain. It is seldom increased by the touch, but sometimes, though rarely, it is tender when pressed. It is usually, though not always, relieved or even removed by the horizontal posture.

“The tender part of the spine, on the other hand, in a great number of instances, is not attended to. It is not thought of till the affected part of the back is pressed, or till a sponge dipped in hot water be applied to it. In either case, a very sensible pain is felt, which, especially when the sponge is used, is, occasionally acute and continues for some time. In general, pressing the spine not only occasions pain in that part, but the pain penetrates to the affected spot of the chest, thus distinctly proving the connection between the two. It often happens that pressure on the spine occasions a feeling of oppression more than of pain in the chest.

“The pained part of the spine, in general, does not exceed an inch in diameter, though it occasionally happens that the uneasiness extends either above or below the tender part, appearing to radiate from it as from a centre, sometimes to a considerable distance. This pain of the side, excited by pressure, is almost in every instance felt on the same side of the spine as the pain in the chest. That is, if the patient have pain in the left side of the chest, then the left side of the spinous process of the vertebra is more tender than the right, and *vice versa*.”

There is seldom any fever with these symptoms—cough is not often present—though sometimes it is convulsive, noisy, and unattended by expectoration. In a girl in the Lock-Hospital, there was pain on the left side of the sternum, as if the part had been bruised. This was distinctly connected with a tender state of the spine, below the middle of the dorsal vertebræ. In two other cases, there was, along with tenderness of the spine, an extended superficial sense of rawness and pain over one side of the thorax, extending even to the abdomen. It required a month's horizontal posture and an issue in the back. According to our author's experience, the source of the complaint is more frequently situated about the 8th or 9th dorsal vertebra than elsewhere.

Next, in frequency, to the middle of the back, this disease locates itself in the upper part of the neck, about the 2d or 3d cervical vertebra. In one very complicated case, there appeared to be two sets of symptoms—each of which radiated from a tender part of the spine, as if from a centre. There was pain in the left side, and numbness and pain in the left arm and leg, distinctly connected with tenderness situated about the lower dorsal vertebræ. After a time, a similar state of the 2d or 3d cervical vertebra took place, occasioning pain in the left side of the neck, commencing near the angle of the jaw, and extending upwards from the neck to the back part of the head, and even to the fore-head, following the ramification of the 2d or 3d cervical nerve. These two sets of symptoms were sometimes entangled and blended together. Posture was tried—then issues were opened on each side of the pained part. After three months' confinement the pains had disappeared; and the lady was allowed to sit up; but the pains returned, and she was again placed recumbent. The malady at length was merged in phthisis, which put an end to her sufferings. We are unable to follow Dr Brown through all the cases he has adduced. These affections appear to him divisible into two classes—"those in which there is merely a morbid sensibility of a single nerve—and those in which there is a more general and constitutional irritability; in which the irritation is apt to affect different parts of the spine in succession, occasioning a train of singular symptoms.

Dr. B has rarely seen the pain in both sides at the same time. The following are the deductions or conclusions to which our author seems to have come.

"These are—that the immediate cause of the pain of the back and breast is spasm of one or other of the muscles, arranged along the spine, altering the position of the vertebræ, or otherwise compressing the nerves as they issue from the spinal marrow.

"That this spasm, in many instances, is strictly a *local* disease produced by fatigue, wrong posture, or other causes, and quite unconnected with the state of the brain, spinal marrow, or nervous system in general.

"But that, in other formidable instances, this partial, spasmodic, or wrong action of these muscles, is owing to a faulty state, perhaps an enlargement of the vessels of the brain, or spinal marrow. This state of the brain, as in many other diseases, gives rise to spasm, or even to convulsion of certain muscles; which partial symptom from its severity attracts the chief attention. This local affection is confined to those portions of the spine where there is the greatest motion, and where of course the muscles having the greatest activity, are most liable to deranged action or spasm. I imagine that this view of the subject is illustrated, and perhaps confirmed by various symptoms, which were observed in the different cases, and which without it, were very incomprehensible. The partial palsy, the affection of the sight, the giddiness of the head (for I find that this was a prominent symptom in several cases, especially in that of A. S.), all give some confirmation to the notion, that the brain is affected in these severe cases.

"I have only to add further, that if we pay attention to the number of the muscles, arranged along the spine, and to their functions, we shall see some reason for their being peculiarly liable to spasm. The variety of separate muscles in this situation is very great; and it ought to be kept in mind, that these are more constantly active than any other muscles, except the involuntary ones, since they are in a state of action in preserving the body in an erect state, as well as in every motion of the trunk.

"This state of the muscles, as being

the immediate cause of the pain, and of various uneasy feelings, is certainly entitled to marked attention, and we find it much moderated by posture, by local application, and especially by friction; but my conviction now is, that we ought to direct our attention at the same time to the state of the brain, as being the source on which severe cases of this description depend."

With all due deference to the ingenious author, we should be inclined to refer the primary source of irritation to the uterus or digestive organs. In many cases, we have distinctly traced it to such sources—and not only these particular pains, but many others, in different and distant parts of the body. We would, therefore, recommend the practitioner to direct his remedial agents, in the first instance, at all events, to the organs alluded to; and, if he fail, he may then direct them to the brain. We do not, of course, take into account those cases where there is actual inflammation, or other disease, of the spinal column or its contents. These will require a very different treatment, the principles of which are now pretty well understood.

72. POISONING BY SULPHURIC ACID.

In the month of October, 1826, a young woman attempted to swallow three ounces of the sulphuric acid of the shops. The greater part of the acid was, however, rejected, and, according to her own account, only two or three spoonfuls went fairly down her throat. Her vomitings, cries, and convulsions, attracted the neighbours, who endeavoured to give her water to drink, but in vain, as she could not swallow. In the evening a physician was called to her assistance, who recommended leeches to the throat, and fomentations to the epigastrium; but the one produced no relief, and the other was insupportable. The wretched patient suffered inexpressible torture, and could only swallow a few spoonfuls of drink. It was on the fourth day from the accident that Dr. Lebidols saw the young woman. She was lying on her back, the lower limbs rigid, face pale, countenance sunk, tongue soft, moist, and white, as was the palatine arch; but the uvula and velum pendulum

were of a deep red colour. She complained of severe pain in the tract of the œsophagus, augmented by pressure, or any attempt to swallow, cough, or even speak. The epigastrium was extremely sensible to pressure. The ingestion of the smallest quantity of fluids into the stomach caused nausea, and efforts to vomit. The abdomen was soft, and of natural temperature, pulse feeble, respiration slow, the lower extremities cold, intellect unaffected. In the course of the following days the symptoms became mitigated, and she could swallow some spoonfuls of broth; but emaciation advanced rapidly, without any feeble movements in the system. A troublesome cough now came on, and she sunk on the 15th day from the accident.

On dissection, the internal surface of the œsophagus was of a cherry redness, and its structure so soft, that it was easily lacerated by the fingers. In the stomach there were various appearances, as long stripes, of a deep red colour—several spots where the mucous membrane was destroyed, and red granulations sprouting up. Near the pylorus, there was a grey membraniform layer, like that which covers an old blistered surface, beneath which, the mucous tissue was of a vivid red colour. The small intestines were of a violet colour, contracted, and containing only bile and mucus. The large intestines were empty, and rigidly contracted. The heart was very large—nearly twice its natural size—marks of engorgement and inflammation in the lungs—nothing extraordinary in any of the other viscera.

The principal object which Dr. Lebidols appears to have in view, in the publication of this case, is to show the remarkable want of febrile symptoms in a most intense gastro-enteritis. If, as the school of Broussais maintains, the phenomena of fever be owing to irritation or inflammation of the mucous membrane of the stomach and bowels, how is it that we had none of these phenomena present when the said membrane was intensely inflamed, and, in many places, destroyed? But then it is to be recollected, that inflammation of the stomach and bowels, resulting from general causes, as those of fever, applied to the constitution at large, is a very different thing from that phlogosis, which results from a direct local application of irritating or poisonous sub-

stances to the stomach itself. In the first case, the morbid agents (say marsh miasma) have acted on the nervous system, and reached the point of producing inflammation of the gastro-enteritic lining—in the other case, the local irritation acts at once on the stomach, and may not produce great constitutional disturbance in particular individuals.—*Archives*.

Several instances analogous to the above are on record, upon the authority of Tartra and others, showing how disproportionate the general or sympathetic affection is to the local.

73. ON AN INTERNAL INFLAMMATION OF THE EYE, FOLLOWING TYPHUS FEVER. BY ARTHUR JACOB, M.D. Professor of Anatomy, &c.

In the volume of Transactions just published by the Dublin Association, there is an interesting paper on the above subject, the principal particulars of which we shall lay before our readers.

That iritis is one of the sequelæ, or consequences, of the late fevers in Ireland, was first shown by Mr. Hewson, in his Essay on Venereal Ophthalmia, and the fact is now fully established by the experience of Irish practitioners. Dr. Jacob himself has met with 70 or 80 examples in the course of one year. He is unwilling to apply the term iritis to this affection, because he does not think that the iris is the part primarily or exclusively attacked. All the internal structures of the eye appear to participate in the inflammation—especially the retina. In all the cases which our author has seen, the patients had suffered from previous fever, within the period of a few months. This affection occurs more frequently in young, than in old persons—it is also much more common among the poor than among the rich—and generally made its appearance about six weeks after the occurrence of fever. Both eyes were seldom affected.

The inflammatory symptoms were usually preceded by those defects in vision which are considered to arise from disease of the retina, such as *muscæ volitantes*, clouds, luminous coils or stars. These, in general, had not existed for more than six or eight days before the appearance of inflammation—in some cases, however,

they had existed for two months. The inflammatory stage was distinguished by the increased vascularity, the cloudiness of the transparent parts, alterations in the condition of the iris, pain, intolerance of light, lachrymation, and defect of vision. The vascularity produces the same appearances which have been observed in other forms of internal inflammation and iritis.

“In this inflammation the transparent parts are rendered more or less clouded or opaque; the cornea especially has its margin or circumference almost always of a whitish or grey appearance, presenting an opaque circle resembling the *arcus senilis*. The anterior chamber of the eye appears clouded, independent of the opacity of the cornea, arising probably from thickening of the membrane of the aqueous humor; this cloudiness is sometimes general, sometimes it presents a muddy patch behind the cornea, as in syphilitic iritis. In the worst form of the disease the lens itself becomes partially opaque, reflecting light falling obliquely upon it, and presenting an opaline amber colour; indeed it is in this way I have observed vision to be destroyed where the disease has been fatal to the organ. The hyaloid membrane of the vitreous humor may possibly participate in this opacity.

“The iris is always altered in colour, the brilliancy of its tints being totally lost; it never, however, acquires the decided yellowish green observed in syphilitic iritis; neither have I observed the abscesses or tubercles, usually called globules of lymph, which characterize that form of inflammation; purulent matter is however occasionally secreted in the anterior chamber of the aqueous humor, constituting hypopion, or unguis. I have not observed that the secretion of purulent matter was a consequence of more intense inflammation; on the contrary, I have seen it in very mild cases, and even where the pupil contracted on exposure to light. The pupil is generally slightly irregular, but I have not observed that it contracts adhesions to the capsule of the lens, or that it becomes closed as in iritis; in many well-marked cases I have found it contract on exposure to light with considerable activity.”

The patients generally complain of a stinging or aching pain darting to the temple or nose—but in many cases there

is no suffering. Intolerance of light is almost always present, attended with scalding lachrymation. Vision is much impaired.

The treatment is not difficult.

"Bleeding, locally or generally, in proportion to the urgency of the symptoms; blistering, where there is much pain or intolerance of light; purgatives, antinomial medicines, and opiate stupes, are obvious means of relief. I am in the habit of using the extract of belladonna very freely, not only in this form of inflammation, but in every other, and more especially in syphilitic iritis, where there is so great a tendency to closure of the pupil and adhesion of its margin to the capsule of the lens. In the contracted state of the pupil, its margin, at least when inflamed, is in contact with the capsule; but when dilated it is altogether detached from it, and consequently cannot adhere. It must however be admitted that the iris, when much altered by inflammation, is not affected by the belladonna; but even under such circumstances its use is not attended with any disadvantage. But it is not from its effect on the pupil alone that the extract of belladonna should be applied; very decided relief is obtained from its application in those cases where there is deep-seated pain, extending from the eye-ball to the temple, and especially in rheumatic inflammation. It may be used as recommended by Beer, in the form of ointment, rubbed in upon the temple, (half a drachm of the extract, with an equal quantity of mercurial ointment every night,) or the extract alone, softened with water, and daubed over the lids and brow, and kept moist for one or two hours with a light fold of old linen wetted every ten minutes, may be preferred. I do not, however, by any means recommend that the surgeon should depend upon these remedies alone; on the contrary, I believe that they will prove ineffectual in the majority of cases, and therefore we must have recourse to mercury, which has been found so valuable a resource in other cases. In my own practice I have found the relief from the use of mercury so certain and decisive, that I have trusted to it almost exclusively, with the assistance of the belladonna. I have generally found that two grains of calomel with a quarter of a grain of opium, three times a day, answered

every purpose; and in the majority of cases I produced the necessary mercurial action, as marked by tenderness of the gums, in eight or ten days, by the use of three, four, or five grains of blue pill alone, three times a day; and if the pain should be severe, combining hyosciamus or belladonna with the dose taken at bedtime."

The sulphate of quinine has been sometimes used by other practitioners; but our author did not find it efficacious *without* mercury—and *with* that mineral it was unnecessary.

74. PARACENTESIS ABDOMINIS THROUGH THE BLADDER.

Surgeons have an extraordinary dread of allowing the aperture in the peritoneum through which the fluid of dropsy is discharged, to remain open. They dread peritoneal inflammation. We have seen three instances where the water kept dribbling away for weeks, and even for months, without any inconvenience—nay, with positive benefit. In two cases the dropsy never returned so as to require an operation.

Dr. Andrew Buchanan, of Glasgow, has lately performed the paracentesis through the fundus of the bladder, with the view of leaving a permanent drain for the fluid collecting in the peritoneal cavity. The operation is, we believe, original, though something like it has been performed long ago by Mr. Watson, who, finding the vagina forming an external protrusion from the pressure of the fluid above, introduced the trocar into the abdomen, in that situation, and drew off the fluid. He informs us, that he practised this three times successfully. A surgeon in this metropolis has, we understand, operated in this way on an ovarian dropsy, but the result has not been yet ascertained by us. The female on whom Dr. B. operated, was not a good subject, being a pauper, who had been tapped twice before the present plan was tried, and whose spleen was enlarged and liver tuberculated. The instrument employed was the curved trocar, used for puncturing the bladder in cases of retention of urine. The canula was first introduced along the urethra, and the

point of it carried towards the upper, and fore part of the bladder, pushing it as far up as possible, so as to put the coats of the bladder on the stretch. The stilette was then passed along the canula, and made to pierce the bladder, which it did with such ease, that no sensible resistance was experienced. On withdrawing the stilette, the water flowed in a full stream, till about 28 pints were evacuated. After withdrawing the canula, the urine flowed more copiously than usual, for a day or two, but then fell back to the scanty quantity generally secreted. No material inconvenience, however, followed this new operation. It was repeated three times afterwards, at various intervals, and never did any harm. At length the patient was worn out by visceral disease, and repeated accumulations of water. When examined after death, the liver was found tuberculated, and diminished in size—the spleen enlarged—the peritoneum free from inflammation—the fundus of the bladder presenting the marks of puncture, the most recent resembling a leech-bite, without any surrounding swelling or redness. The attempt was certainly ingenious, and could Dr. Buchanan have succeeded in establishing a fistulous communication between the bladder and the peritoneal cavity, his object would have been attained, though, under existing circumstances, this patient's life could not have been ultimately saved. The case in question proves that we have no reason to dread an effusion of urine from the bladder into the peritoneal cavity, after paracentesis in this place. And if this be the case, we imagine it must be granted, that there is equally little danger of air escaping into the abdomen, in consequence of leaving open the puncture of the trocar in common paracentesis abdominis. At the same time, we would use the precaution of proper bandaging, to keep the abdominal viscera compressed.

75. CLINICAL REPORT OF THE HÔTEL DIEU. By M. BRESCHET.*

The subject of this Report is the affection

* Repertoire, 1828.

called *ranula*, which is generally imagined to consist in an accumulation of saliva in the sub-lingual or sub-maxillary ducts, in consequence of their orifice having been choked up. The disease appears to have been tolerably well known to the ancient writers, at least Hippocrates and Celsus make mention of a tumour occurring under the tongue, though they entertained erroneous notions of its pathology. It has been observed by some writers that *ranula* is more frequent in infants than adults, but M. Breschet is of opinion, from several dissections, that common serous cysts beneath the tongues of children have often been mistaken for this particular disease. The viscosity of the saliva which has been considered as the cause of the disease, M. Breschet looks on merely as the consequence of the plugging up of the salivary canal, which may arise either from inflammation of the mucous membrane, aphthæ, or ulcerations in the canal itself. In dividing the *frænum linguæ*, some of the excretory ducts which open on its sides may be wounded by the knife, and afterwards become obliterated by the cicatrix; small calculi will also occasionally form within the ducts and check the flow of the saliva, a circumstance which happened to the late Mr. Cline, and gave him considerable inconvenience. The amount of these concretions is at times considerable, and the fluid, instead of resembling saliva, may be puriform, or even entirely purulent.

The symptoms of *ranula* are easily distinguished by a surgeon at all cognizant of the affection. The tumour is soft, whitish, regularly round or oblong, situated just beneath the tongue, having neither pain nor redness, nor, in fact, any of the characters of inflammation; elastic, fluctuating, at first so small as scarcely to be felt, and slowly acquiring size. In general, its volume is little larger than a nut or pigeon's egg, but in some instances it far exceeds this, and M. Breschet remembers having seen a man in whom the tumour appeared beneath the chin, and stretched from that in front of the neck, almost to the sternum, entirely preventing circulation. In a case which happened to Le Clerc, the tumour filled the mouth, thrust forward the teeth, and formed a prominence externally as large as a duck's egg. It may

perhaps admit of doubt whether these large tumours are really dilatations of the sub-maxillary or sub-lingual ducts, but, whatever they may be, they cause extreme distortion, doubling back the tongue, displacing or pushing out the teeth, altering the voice or preventing articulation altogether, and hindering suction in children, mastication and deglutition in adults.

The treatment resolves itself into palliative, and that which aims at a radical cure. The first consists in merely making an opening into the tumour within the mouth, and evacuating the fluid which it contains. Some have made their incision beneath the angle of the jaw, instead of within the mouth; but this plan is attended with danger of a salivary fistula. Le Clerc, however, operated in this manner with complete success; but probably his case was one of those where a large cyst exists filled with serum, instead of the true ranular tumour. When a simple puncture has been made, the orifice quickly heals, the fluid again collects, and a fresh operation is required; indeed Petit relates an instance, where it was repeated ten times, and was ineffectual after all. Some have practised large incisions in the sac, others have cut out portions of it, and introduced into the opening tents of various kinds, portions of bougie, &c. while Sabatier employed a canula, which he left until the edges of the opening had become completely callos; but all these plans have failed in other hands. A large portion of the walls of the tumour has been removed, but though this operation may delay cicatrization, it does no more—the wound ultimately heals, and the malady returns. It has been proposed to extirpate the tumour, but unless the gland which fed it were extirpated too, the operation would in all probability be ineffectual, and it would be a bold attempt indeed to perform so severe an operation for so harmless a disease. If, as is supposed, the disease consists in an obliteration or obstruction of the salivary duct, then the employment of stimulant injections, as has been recommended, must be worse than useless, because they tend, of course, to increase the agglutination and obstruction. This is not the case when it is a common cyst, containing serum or lymph, for here the puncture of the tumour and

employment of irritating injections would probably be of service.

The use of the actual cautery as a mean of opening the tumour, and preventing the opening from closing afterwards, is of very ancient date, as ancient indeed as the times of Hippocrates, who employed it himself. Acids have also been had recourse to, and Camper employed the lapis infernalis, although he confesses that it was frequently ineffectual; in short, all the methods which have been proposed or executed have been more or less unsuccessful in the long run. This want of success depends upon the tendency of the artificial opening, whether it be made by incision, or by the cautery, to contract and close; but M. Breschet tells us that Baron Dupuytren has at length discovered a method by which the closure of the wound is entirely prevented. Having made an opening into the tumour, the Baron takes a small instrument invented for the purpose, introduces it, and allows it to remain, just as the stilette is allowed to lie in the lachrymal canal, after the operation for fistula lachrymalis. This instrument appears from the description to be very similar in principle to that invented by Mr. Weiss for perforation of the soft palate. It may be made of silver, gold, or platina, and consists of a hollow cylinder, about three lines in length, and one, or one and a half in diameter, with a small, elliptical plate, convex externally, attached to either extremity of the tube. The use of these two small plates is to prevent the tube from slipping either *into* the dilated duct, or *out* of that into the mouth, for the opening having been made, and the tube introduced, one plate of course lies on the *inside* of the wall of the tumour, and the other on the *outside*, retaining the instrument in its position. If the tumour be of great size, or its walls much thickened, a free incision should be had recourse to before the application of the tube; in some cases it may be even necessary to cut out a portion, and allow the wound to nearly close prior to the introduction, but with these precautions our author affirms that M. Dupuytren has experienced complete success. Five cases are given in illustration, all of them occurring at the Hôtel Dieu, and therefore above suspicion of inaccuracy or colouring.

Case 1. Bruno Duchâteau, æt. 24, ex-tambour of the garde-impériale, was admitted, October 14th, 1807, with a small oblong tumour beneath the tongue, appearing to be a dilatation of the excretory duct of the sub-maxillary gland. Every kind of treatment had been adopted—incision—excision—cauterization, but all with the same success, or rather want of it. The Baron having opened the tumour with curved scissors, and given vent to a quantity of limpid, inodorous fluid, took up the little silver tube with a pair of forceps, and introduced it into the opening, so that one plate lay within the tumour, and the other on its outside, in the mouth. The disease very quickly disappeared, and in fifteen days the patient left the hospital, being able to eat, speak, &c. with the most perfect ease.

In the second case, the tumour had existed for several years, was about the size of a pullet's egg, and was perfectly cured by the above means. In the third case, there were tumours, one on each side. M. Dupuytrén, for experiment's sake, introduced the instrument into one but contented himself with merely making an incision into the other. The former was cured, the latter not, when the Baron treated it in the same way, with the same success. The two other cases were equally fortunate, save that in the last a tumour re-appeared, almost on the site of the one which had been treated. It was found, however, to exist in the dilatation of another duct, and after being punctured was dispersed.

The "sub-lingual and sub-maxillary tissues" are subject to an inflammatory swelling, which may be mistaken by an unpractised surgeon for common ranula, but which requires a very different treatment. The tumour in this case appears suddenly, increases quickly, and is accompanied by tension, pain and redness. The following is a case of this kind.

Mary Eugrot, æt. 21, having irregular menstruation, entered the Hôtel Dieu, May 20th, 1821, with a hard tumour, beneath the lower jaw, formed by the sub-maxillary gland. The enlargement had been present for upwards of six years, was about the size of a pigeon's egg, painful to the touch, and, on the least pressure, there was forced into the mouth a fluid, made up of mingled pus and saliva. On the other side, there

had formed beneath the tongue, within the last six weeks, a hard elastic tumour, which prevented speech, and caused some difficulty of respiration and deglutition. Its redness, pain, and hardness, induced M. Dupuytrén to think it depended upon inflammation of the sub-maxillary duct, and accordingly he applied leeches, emollients and derivatives. In four and twenty hours there was a marked amelioration, and at the expiration of a week she left the hospital, without either pain or tumour.

We have thus given an exposé of the practice of that distinguished surgeon, M. Dupuytrén, in a very troublesome affection. Whether the plan he has recommended and adopted will be equally successful in other hands we shall not pretend to say; but, at any rate, it is worth a trial, particularly at our hospitals. By-the-bye, we think our English reporters somewhat behind their French *confrères* as yet; at least as far as the *utile* is concerned. In the *dulce*, i. e. the transmutation of certain sheets of letter-press into the much abused and much loved "filthy lucre," we verily believe that our native "gentlemen of the press" have fairly won the day. The fact is this, that the French reporter, for the most part, takes up a certain point of practice, and illustrates it, as far as possible, by a variety of cases; whereas, the Englishman is too much in the habit of giving a solitary case or so, because it is "curious" or out of the way; in other words—good for nothing.

76. ANEURISM OF THE TEMPORAL ARTERY.

It is well known that after arteriotomy, an aneurismal tumour occasionally forms in the temporal artery, and is productive of considerable inconvenience. In this country, the operation of opening the vessel is considered as exceedingly trifling, and constantly performed, but it would appear from a memoir on the subject by M. Desruelles in the Transactions of the Medical Society of Emulation, of Paris, that it has rather fallen into disuse in France. M. Desruelles, is a very warm advocate of the operation, and exclaims most eloquently against the reality of

those dangers which alarmists have conjured up. According to M. D. indeed, the opening of the vessel is so simple, that if patients were more accustomed to it, they would certainly prefer it to venesection; like the eels we suppose, who, are so used to the process of skinning, that they scarcely feel it!

Several cases of aneurismal tumour are detailed by our author, in order to prove the facility of treating them, especially in the early stages.

Case. A soldier of the Royal Guard entered the hospital of Gross-Cailion, labouring under intolerable pains in the head. These were entirely removed by opening the temporal artery, and on the second day the bandage was taken from the vessel. Three days after this a pulsating tumour, about the volume of a pea, was perceived over the vessel, and in the course of a few days more it had perceptibly increased in size. Compression was employed, and at the expiration of a fortnight, only a small hard body could be felt, the pulsations having entirely disappeared.

The second case is that of a gentleman of full habit and bloated aspect who was bled by our author in the temporal artery. The vessel was not fairly cut across, and on the evening of the third day the patient felt something give way in the temple, where an aneurismal tumour made its appearance. Compression on the trunk of the temporal was completely successful in removing the disease. However, pressure is not in all cases attended with success, nor is the complete division of the artery a safeguard against the occurrence of an aneurism.

Case. M. V. an officer in the guards was bled from the temporal artery, for an obstinate cephalitis. The vessel was completely cut across, but the compression was slight, and thirty hours afterwards the bandage was entirely removed. On the third day the wound was painful and on the fourth a small tumour formed. Compression was employed, but the aneurism increased in volume, and slight suppuration took place about the wound. Pressure on the temporal branch was then employed, but in spite of it, a violent hæmorrhage took place. Pressure was made upon the wound, and a good

deal of swelling about the parts ensued. In the course of a couple of days the hæmorrhage returned, and M. Larrey tried ineffectually to discover the ends of the artery and tie them. The patient was bled, and the hæmorrhage ultimately stopped by the application of a cold poultice to the wound and ice to the head.

The fourth case was that of a young lady, on whom compression was tried by means of a ribbon, and almost entirely succeeded. She went to a ball, danced too much, the tumour re-appeared, and in a few days burst. M. D. tied the vessel an inch below the wound, and the disease was cured. From these cases our author thinks that aneurism of the temporal artery is owing either to the vessel not being cut across, or to an imperfect employment of compression.

He also thinks that when the disease has shown itself, compression will be sufficient to effect a cure, provided it be properly and immediately employed. When this has failed, ligature of the vessel which feeds the tumour is to be resorted to, but the surgeon should never think of endeavouring to secure the two ends of the vessel, as they are engaged in the inflammation, and extremely difficult to find.

77. REGULATION OF LUNATIC ASYLUMS.

Most people in this country are aware (too many of them to their cost) how easy it is to legislate in the closet; but how difficult it is to adapt the regulations of the legislature to the practical purposes of real life. It is very common to find laws, which appear to be the very beau ideal of wisdom and justice, in the senate, turn out, in actual experience, to be, not merely lame and impotent, but positively tyrannical and unjust. Such is the difference between theory and practice! Upon the Bill now passing through Parliament, for the Regulation of Mad-houses, a gentleman of considerable talents and good practical observation, has published some strictures, which we shall notice cursorily in this article.

He observes that, since 1815, when a report was made on the actual condition of lunatic asylums, very great improvement

has been made in private establishments, and men of education and high respectability have embarked large property, as well as superior skill in their construction and direction. The present bill appears to be badly calculated to encourage such speculations.

"Far from encouraging medical men to study the treatment of insanity, and to undertake the care of lunatics, as suggested by the Committee of the House of Commons in 1815, the Bill, as it is now arranged and presented to the House of Peers, tends to debase the whole profession; for it betrays a total want of confidence in their moral and medical character; so much so, indeed, that if the Bill pass into a law, no medical man who has any regard to his professional reputation can undertake the care of lunatic patients, either as proprietor or superintendent of any house for their reception, or as a regular attendant on the patients in it.

"The consequence must necessarily be, that the houses for the reception of lunatics will pass from the hands of medical men, whose characters are at stake, and who are admitted to be most competent to the charge, to those whose sole object is lucre; and who, being unrestrained by the honourable feelings of men of education, will readily find means of evading the provisions of the Act, if they can thereby accomplish their end."

The writer observes, that the duties of the Commissioners, according to the present Bill, will require ten or twelve days for each quarterly visitation of the London district—and, consequently, that "no medical man, of mature judgment, and in actual practice, can make such a sacrifice of his time as this duty will require. It may be remarked, too, that the treatment of insane cases does not properly belong to surgeons." We confess that this last part of the passage appears to us rather futile—and as coming with a bad grace from the writer, whom we know to have been a surgeon almost the whole of his professional life. If, indeed, insanity is to be treated on metaphysical principles, then we grant that the graduate of Edinburgh, and still more the M. D. of Oxford or Cambridge, just launched from the stocks, and who, by the way, will have ample time for his quarterly visitations, is a more proper personage for

Commissioner of Lunatics, than the surgeon who has been plodding in the dissecting-room. But we apprehend that it is full late in the day to preach these doctrines.*

It appears that some of the details in the Bill will be productive of great inconvenience and expense to the proprietors of lunatic asylums, without any corresponding advantage. For these we must refer to the pamphlet. The following passage, however, we shall extract.

"The Commissioners for the London district, and the Justices of the Peace in counties, may refuse to grant or renew the annual license, without assigning any reason; and against such decision there is no appeal!

"As the law now stands, the Commissioners of the College of Physicians, and County Magistrates, are bound to grant licences.

"The proprietors of houses are perfectly ready to submit to any penalty commensurate with the offence which the legislature may think proper to impose. But they feel it to be an extreme hardship that, after devoting themselves for many years, perhaps solely, to one line of practice, and expending large sums of money—in many instances their entire property—in forming respectable establishments; both their reputation and property should be exposed to ruin by this arbitrary power being given to those who are likely to be swayed by ignorance of all that relates to the insane, or by local and popular prejudices.

"Licenses may be revoked also by the same authorities; and such refusal or revocation is forthwith to be published in

* The honorable and zealous Member of Parliament (Mr. Gordon) who is "working the Commission," stopped the writer of this article the other day in the street, and complained of the dilemma into which he had got with the Doctors, for recommending a proportion of surgeons to be put on the list of lunatic Commissioners. The writer, who is a professed enemy to all monopolies, advised Mr. Gordon to persevere strenuously in the equation of lunacy among both classes of the profession. The honorable M. P. seemed highly pleased at having the sanction of a critic for his proposed scheme.

the *London Gazette*, or a county newspaper. If, after such publication, the proprietor continues to keep two or more patients for fourteen days, he is declared guilty of a misdemeanour. No provision, however, is made for the disposal of the patients in such event. In many instances their friends reside on the Continent, or in the East or West Indies; or there is no immediate relation who will receive them, or they are wards of the Court of Chancery; and in that time perhaps the patient could not be disposed of. The proprietor of the house must either turn all these helpless beings adrift, or retain them at the risk of a prosecution."

There are many clauses in this Act which certainly appear to be very objectionable—for instance, nocturnal domiciliary visits from the Commissioners, which would be sure to create universal consternation and agitation among insane inmates, who are so susceptible to every impression.

"The *lunatics* themselves, too, are at liberty to require the assistance of any minister or spiritual teacher; and the reason for refusing it is to be registered! The patient, however, is the last person to whom such a power ought to be given; but when he learns that the law sanctions his request, it will be constantly preferred, and the refusal of it be a cause of prejudice against the superintendent, for whom every patient ought to possess great respect."

When there is religious monomania, which is by no means rare, such communications would certainly tend to increase the malady rather than diminish it—for every one knows that, to reason with the insane on the subject of their hallucination, is uniformly prejudicial to the patient.

The certificate is to be signed by two medical men, who shall have *separately* examined the party. This is considered a great hardship in the country, where "it frequently happens that there is but one medical man within fifteen or twenty miles." We wish the writer would point out these happy regions; and we will be bound that they shall very soon be peopled with a plentiful colony of the *Mexici* family. The author observes that, "throughout the country, medical practitioners are generally rivals, and are very apt to espouse adverse views and opin-

ions"—hence it would, he thinks, be very difficult to obtain their concurrence in the necessary certificate. We think this difficulty is magnified; although we cannot help agreeing with the author, that the certificate of one *regular practitioner* is sufficient, provided the patient be not sent to any establishment with which the certifier has a professional or pecuniary concern. The clause relating to medical attendance in private asylums is strongly objected to by the author, as inconsistent and impracticable.

"First, Why should thirty-one patients have the benefit of a daily medical visit, while thirty are to receive only six visits in a month? Second, Patients may be divided into two classes; those in whom the disease is of long standing, and whose recovery is nearly hopeless—and those whose disorder is of recent occurrence. In old-established houses, a large proportion of the patients usually consists of the first class. Their bodily health may be good, their mental disease subject to little or no variation. A register, containing a statement of what attention the medical attendant has bestowed on every such patient, with observations on his case, would be uselessly voluminous and burdensome. In most instances, such cases require no more than a glance of the physician's eye, or, at most a few words of conversation: to devote greater attention to them is inexpedient. No medical man of reputation will undertake to superintend or visit a licensed house, if he be compelled to enter daily all his reasons for his moral, as well as his medical treatment, in a register, which is to be examined in his absence by strangers, who may wholly misinterpret his views, and to whom he has no opportunity, even if he wished it, to give an explanation."

The last objection which we have room to notice, is the power granted to the Commissioners or Visitors to discharge patients. There can be no doubt that, in many instances, especially where the Commissioners or Visitors are not medical men, there must be much incompetency as to the decision respecting such discharge. A melancholy example is adduced, where a late President of the College of Physicians desired the discharge of two female patients—one of which drowned, and the other hanged herself.

very soon afterwards !! The writer concludes thus :—"Finally—the bill is an experimental one for three years; but if it pass, the evils flowing from it will be immediate, and many proprietors probably irretrievably ruined before that period expires." Believing that the framers of the Bill are actuated by the most disinterested and humane motives, we have little doubt that these observations of a man practically acquainted with all the details of a lunatic establishment, will have their proper influence, and may tend to modify some of the objectionable clauses, ere yet they pass into a law.

78. SENSATION—MOTION—VOLITION.

From a little memoir lately published by Magendie, (and translated into English*) on some recent discoveries relative to the functions of the nervous system, we have selected the following extract, as both curious and interesting.

"Undoubtedly, it would be of the utmost importance to ascertain how sensation and motion,—which, as it has just been stated, have their seat in the spinal marrow,—are propagated to the head, and extended to the brain and cerebellum; or, to be more explicit, how the impressions perceived by the senses and the determinations of the will are transmitted to the spinal marrow. Here experimental difficulties become almost insuperable; and I must confess that up to this day I have reaped nothing satisfactory on so delicate a question, and one which appears intimately connected with the most important secret of life.

"The innumerable experiments I have unsuccessfully tried hitherto, have, however, enabled me to ascertain one fact, which appears to me worthy of being noticed by physiologists, and respecting which, as far as my information goes, nothing yet has been advanced.

"If in a living animal you deprive the cerebral hemispheres of the power of acting, the animal will run straight forward with astonishing rapidity, as if pro-

pelled by some invisible and irresistible hand. If, on the contrary, the cerebellum be deprived of the power of acting, locomotion assumes quite an opposite course—the animal recedes. It is a most remarkable phenomenon, for instance, to witness a bird, slightly wounded in the cerebellum, effect, for several successive days together, no other motions, either for walking, swimming, or flying, except in a retrograde direction.

"There should appear to result from these experiments, that any animal, otherwise enjoying its natural state of health, is placed, as it were, between two powers, which counteract and balance each other—the one impelling forward, the other backward; and that these two powers are completely under the influence of the will.

"A disease of the horse, and which is not generally known, seems perfectly calculated to elucidate these last results. Farriers term it *immobility*; and, in fact, if you attempt to drive the animal backward, let the means and strength you resort to be what they may, it remains rivetted to the spot,—the motions forward, on the contrary, are remarkably easy, and at times seem to be effected independent of the will.

"If the consequences I have just drawn be correct, the disease must consist of some physical alteration in the brain, or in some obstruction or other in the action of that organ.

"A few days ago I had two horses afflicted with immobility examined, and my conjecture was perfectly correct. In both the brain was evidently diseased and the cerebellum perfectly sound.

"It then appears demonstrated, that these two opposite powers of the brain and of the cerebellum exist in animals; and that in some peculiar cases these powers may resist the influence of the will.

"Is this the case with man? Can our motions, which execute with so much precision the dictates of the will, cease to obey their commands, and be, as it were, in a state of rebellion? Finally, is the faculty of volition distinct from that by which our motions are regulated? Such are delicate questions we hardly dare to venture upon—they seem to lead to arduous abstractions, the insuperable limits of human understanding; but,

* The translation is published by Mr. Nimmo, in the Borough.

however, I have witnessed myself, and I have had an opportunity of studying for several successive weeks, in a well-informed man, perfectly qualified for self-observation, a complete distinction between the will and that power by which our movements are regulated.

"Subsequent to violent grief, the person I allude to, to his utmost surprise, was suddenly deprived of the influence of his will over his motions; in spite of himself, he was compelled to assume the most ridiculous attitudes, and to make the most extravagant contortions. The eccentricity of his actions and postures baffle all description; in certain cases his motions would be natural: thus, without the slightest intervention of his will, he was seen to rise and walk precipitately forward, until he came in contact with some solid body that impeded his course;—at other times he would recede backward with equal promptitude, until he was checked by some similar cause. In other instances he was observed to recover the use of certain motions, and to remain incapable of directing others. It was thus that his hands and arms frequently obeyed the dictates of his will, and more frequently again could he regulate the muscles of his features, and those connected with the organs of speech. At times he was allowed to walk backward, whilst his progress forward became totally impossible; he then would resort to this mode of progression to reach the objects he had in view. This state lasted four calendar months, and terminated most successfully. A few grains of a substance which chemistry has lately discovered, (the sulphate of quinine,) sufficed to confine his motions to the immediate dictates of his will.

"It may then be correct to admit, that the faculty of volition is perfectly distinct from that faculty by which our motions are directed and classified into regular acts. Such is the only consequence I wished to infer from the fact I have just stated. Several others rush to the mind, —to follow them up would make a metaphysician of me, and I mean to remain a physiologist."

79. SUCCESSFUL LIGATURE OF THE INTERNAL ILIAC.

Another piece of bold surgery has been recently displayed by the transatlantics. Mr. White, of Hudson, has tied the internal iliac artery—with the solitary precedent before him of Mr. Stevens' operation, recorded in the *Medico-Chirurgical Transactions*. The patient, in the present instance, was a man aged 60, by trade a tailor, who presented a tumour about the size of a child's head, situated on the left hip, directly over the sciatic notch. It was of ten month's standing, and unattended with pain. The general health was good, with the exception of rheumatism.

"Upon making an examination of the tumour, the skin was found not discoloured, fluctuation was perceptible, but there was no pulsation. The absence of the last symptom rendered it difficult to decide upon the nature of the case, and accordingly we postponed giving an opinion until a consultation could be held with his family physician, Dr. Hicks, of Columbiaville. The doctor stated that the tumour could be removed by pressure, when small, but from other cases he had seen of a similar kind, he presumed that it contained pus. He proposed opening it, and as that was the only way of ascertaining, unequivocally, the nature of the disease, we acquiesced. He accordingly punctured it, and nothing but florid blood made its appearance. A probe was passed in, and an aneurismal sac was found, about five inches deep. It was also discovered that the parietes of the sac were very firm and unyielding, which accounted for the absence of pulsation. After allowing a pint of blood to be discharged, the orifice was closed with a suture and adhesive plaster. It was observed that after this and also subsequent discharges of blood, the sac would fill again and the tumour resume its usual dimensions. The disease was supposed to be produced by repeated falls upon his left nates. He was a man of rather intemperate habits, and, when stupefied by liquor, would fall, as they expressed it, like a log. Being also lame in his left limb, from rheumatism, he, consequently, was most liable to fall upon his left nates."

* Amer. Jour. of the Med. Sciences, No. 2.

A consultation was held, when it was unanimously agreed that the disease was aneurism, and the question arose whether it would be better to tie the gluteal or the internal iliac artery. The latter operation was determined upon, and performed in the following manner.

"On the 23d of October he was laid upon the table, and an incision was made of a semi-circular form, commencing two inches to the left of the umbilicus, and ending near the external ring. It was seven inches in length, and the convexity of it was towards the ileum.

"After dividing the skin, cellular substance, and superficial fascia, it became necessary to secure a few small arteries. The tendon of the external oblique being exposed, was next divided, and then the internal oblique and transversalis with its fascia. The peritoneum, which now presented, was detached from the iliacus internus and psoas magnus muscles, with the fingers, and was pressed with its contents towards the right hypochondriac region, by the assistance of my father. The external iliac was immediately felt, and by passing the finger towards the sacro-iliac symphysis, the internal iliac was distinctly recognized. The artery was then exposed with the handle of the scalpel, and the ligature passed under with the Philadelphia needle, one inch from the bifurcation. Instead, however, of drawing up the needle part with the hook, I found it more convenient to take it with the dressing forceps. One ligature being passed, it was found necessary, from the great depth of the parts, (being about five inches,) to pass down the knot with Dr. A. E. Hosack's knot applicator. The ligature was then firmly tied, and the parts were brought together with sutures and adhesive plaster.

"In this operation the same difficulty existed as in the case of ligature of the common iliac, by my distinguished friend, Dr. MORT, of New York, viz. the constant protrusion of peritoneum from abdominal compression created by the struggles of the patient.

"Some pain in the bowels, and fever came on a few days after the operation, which were removed by venesection and a laxative. Union by the first intention had taken place to a considerable extent at the first dressing on the eighth day. A considerable quantity of pus was dis-

charged during the first four weeks, at the expiration of which time the ligature came away. The tumour has discharged its contents gradually, and the parts have assumed their natural appearance. The patient has so far recovered his usual state of health, as to be able to walk about his neighbourhood."

We need hardly say that this is another honourable trophy added to the surgical reputation of our American brethren. Verily these sons of the new world are not degenerating in their progress along the stream of time, like some of the worn-out monarchies of the old hemisphere.—*Perge!*

80. THAMES WATER.

The Commissioners, (Dr. Roget, Mr. Brande, and Mr. Telford,) have at length made their report, and, upon the whole, we consider it a proper one—such as men, unbiassed and unprejudiced, would naturally construct from the evidence that came before them, and their own reasoning on the subject. It is some years since we publicly remarked on the abominable practice of supplying a great portion of the inhabitants of this metropolis with water issuing from their own cloacæ! Who would believe that such a supply of water would have found venal advocates, even in the medical press of this country? Such, however, is the fact. The following extracts from the official report will be sufficient for our present purpose.

It appears that the quantity of water required for the daily supply of the inhabitants of the metropolis, and for the use of the various manufactories requiring it, amounts to about 29,000,000 gallons, or 4,650,000 cubic feet; the greater portion of which is derived from the Thames. The Report states, "that the present state of the supply of water in the metropolis is susceptible of and requires improvement; that many of the complaints respecting the quality of the water are well founded, and that it ought to be derived from other sources than those now resorted to, and guarded by such restrictions as shall at all times ensure its cleanliness and purity." With respect to the Thames water, the Report

states that specimens taken from various parts of the river from whence the supply is obtained, had been put into the hands of Dr. Bostock, an eminent chemist, for the purpose of examination, and the following is an extract from the Report he presented on the subject :—

"It appears that the water of the Thames, when free from extraneous substances, is in a state of considerable purity, containing only a moderate quantity of saline contents, and those of a kind which cannot be supposed to render it unfit for domestic purposes, or to be injurious to the health. But as it approaches the metropolis, it becomes loaded with a quantity of filth, which renders it disgusting to the senses, and improper to be employed in the preparation of food. The greatest part of this additional matter appears to be only mechanically suspended in it, and separates by mere rest. It requires, however, a considerable length of time to allow of a complete separation, while, on account of its peculiar texture and comminuted state, it is disposed to be again diffused through the water by a slight degree of agitation, while the gradual accumulation of this matter in the reservoirs must obviously increase the unpleasant odour and flavour of the water, and promote its tendency to the putrid state."

"Regarding the greatest part of the impure matter in the Thames, as mechanically mixed in it, we may conceive that a variety of incidental circumstances will affect its quantity, in the same situation and under the same circumstances of the tide; but the observations are sufficiently uniform to warrant us in concluding that the water is in the purest state at low tide, and most loaded with extraneous matter at half ebb. It would appear, however, that a very considerable portion, if not the whole of this extraneous matter, may be removed by filtration through sand, and still more effectually by charcoal and sand. The Commissioners, however, say that they consider that the most perfect system of filtering can effect only a partial purification. It is stated that the Thames water, in what is called the London district, has suffered a gradual deterioration within the last ten or twelve years, to such an extent as to have almost destroyed the fishermen's trade between Putney-bridge and Greenwich." The

Commissioners add, that "it is obvious that water receiving so large a proportion of foreign matters as we know find their way into the Thames, and so far impure as to destroy fish, cannot, even when clarified by filtration, be pronounced entirely free from the suspicion of general insalubrity. In reference also to this question, we apprehend that there are no grounds for assuming the probability of any improvement in the state of the water drawn from the London district of the river."

Water taken from the London Docks had been examined, and it did not contain the least quantity of copper. The Report says, the New River water is not open to the same objectionable impregnations as that of the Thames, but is susceptible of great improvement. It recommends the putting a stop to the draining the adjacent lands into the New River, and also the preventing persons bathing. It adds, "Great benefit would result if the inducement to bathe in the New River were superseded by the establishment of baths in the neighbourhood of the metropolis, to which the public might, under certain regulations be allowed access." It has been stated in evidence, that the New River Company have voluntarily offered to furnish sufficient supplies of water for a purpose of such manifest utility.

The Report does not enter into the examination of any practical schemes for a general and better supply of water to the metropolis.

There can be no remedy—no effectual remedy, for the evil, but transferring the source of supply to a part of the river beyond the reach of the tide—or to some other river, uncontaminated by common sewers.

81. DISEASES OF INFANTS.

In a clinical report which Dr. Guibert has made from the Hospital for Children, in Paris, several cases are detailed where tuberculation of the lungs, and even of other organs, had gone to a great extent, before the age of three or four years. These cases prove, we think, that tubercles, or at least their germs, are born with us, their more or less rapid development afterwards depending on various causes, as bad diet, cold, inflammation,

&c. We shall state the particulars of one or two cases.

Case 1. Eugene Godard, aged three years, had been for some time affected with cough and chronic diarrhoea. To these symptoms were added pain in the epigastrium, delirium, convulsions, and violent fever. He was received into the hospital in this state, and died three days afterwards.

Dissection. There were nearly five ounces of serous effusion in the brain—the membranes thickened and opaque—and several portions of cerebral substance softened down to an almost purulent fluidity. In the chest, the right lung was found to be nearly in toto disorganized by hepatization and tuberculation, with several tuberculous excavations, such as are seen in confirmed phthisis of older subjects. The left lung was tuberculated in many places. The abdominal organs were sound.

Case 2. Louis Gelé, aged three years, had coughed for some months, and considerably emaciated. He had also diarrhoea, with constant fever, exasperated in paroxysms every evening. In this state he entered the hospital, on the 23 of January. The chest sounded badly—the emaciation advanced, and he died on the 2d of February.

Dissection. The arachnoid was thickened and opaque, with albuminous exudation beneath—several portions of the right hemisphere of the brain were in a state of mollescence, resembling bloody bouillie. Both lungs were completely studded with tubercles, and, in many places, hepatized. There was a cavern in the right lung filled with tuberculous matter, that drained into it from broken-down tubercles in its neighbourhood. On the internal surface of the ventricles of the heart, there were tubercles, as also in the liver, spleen, and mesentery.

These cases, and a great many others which the author has brought forward, of a similar kind, ought to put practitioners on their guard, when called to children labouring under febrile or inflammatory excitement. The brain, the lungs, and other organs of infants, are nearly as prone to diseases as those of more adult age.

82. HOSPITAL PRACTICE.

1. *Fracture of the Cervix Humeri.**

Charles Bell, æt. 21, a robust sailor, whilst upon deck, fell with much force upon the shoulder which deprived him, in a great measure, of the use of that arm. Nothing was done for him, and, six weeks afterwards, he entered Guy's Hospital, the shoulder being wasted, and the tubercles of the humerus not above the third of an inch from the acromion. On carrying the arm from the side, and rotating it, there was a crepitus perceptible, the tubercles moving with the shaft of the bone. On pressing just anterior or posterior to the "tubercles," there was acute pain, and if, at the same instant, the arm was rotated, crepitus was felt. The motions of flexion and extension were imperfect, abduction altogether gone, but he could still lift considerable weights. A pad was placed in the axilla, and the arm kept fixed to the side by proper bandages.

In a clinical lecture on the above case, Mr. Key remarked, that it sometimes requires a very accurate examination to detect fracture of the cervix humeri, on account of the little displacement which occurs. The limb, in these cases, is slightly shortened, and somewhat deformed—there is inability to raise the arm, though the underhand motions still remain—and, thirdly, if the arm is raised and rotated at the same time, there is a crepitus; whilst if the arm be simply rotated, there is very frequently none. Sometimes the most careful examination will not detect this latter sign, as happened to Mr. K. in a case where the other symptoms of the fracture were distinctly present, although the crepitus was only accidentally discovered on the fourth day. When there exists considerable tumefaction, the crepitus is most readily detected at the coracoid process, which is explained by the circumstance, of bone being a better conductor of vibration than the swollen soft parts around the joints. It is laid down as a distinctive character of fractured cervix humeri, the preservation of the underhand motions of the arm, and the power of lifting heavy weights, "which can only be effected," says the reporter, "by the action of the biceps." If, by

* Med. Gaz. No. 22.

this, it is meant that, in lifting a heavy weight, the biceps only is in powerful contraction, we beg leave to differ from the reporter *toto cælo*. If the reporter ever saw a man lift a considerable weight solely, or even *mainly*, by the action of the biceps, all we have to say is, that he has seen more than any body else ever saw before him. The thing is utterly impossible, and if the gentleman will only take the trouble to raise a fourteen-pound weight from the floor, he will quickly find it so. The action, so far from being performed entirely by the biceps, is performed almost entirely by those great muscles which arise from the sides of the chest and neck, and are inserted about the upper end of the humerus and scapula, as the trapezius and levator scapulae, the pectorals, serratus, and latissimus dorsi. When the fracture is in the cervix humeri, it is *above* the insertion of the great pectoral and latissimus dorsi, as well as of the scapular muscles which are inserted into the tubercles; consequently, these muscles can act with considerable force in raising the load: but we should like to see the man who could lift even a moderate weight when the fracture is *below* the insertion of these muscles, although the biceps still retains its power.

To return to the crepitus;—the circumstance of this being felt opposite the coracoid process, has led, in some cases to the mistake of considering the case as one of fractured cervix scapulae. When it is remembered, however, that this is so rare an accident, that Sir Astley Cooper never saw an instance of it, the error will not be likely to occur. It is singular that Mr. Abernethy, in his lectures, speaks of this fracture as if it were nothing unusual. He describes the whole joint as dropping down, "the cup and the ball and all, leaving a great vacancy under the acromion." The accident according to Mr. A. is exceedingly liable to be mistaken for dislocation; but we think it not improbable that Mr. A. may have been himself mistaken,—at any rate, it would be satisfactory to learn in how many dissections the worthy lecturer has found the fracture where he describes it.

2. Case showing the Effects of Fear upon the Results of Operations.

John Cooper, æt. 14, was admitted

into St. George's Hospital, April 9th, 1828, under the care of Mr. Brodie, with extensive disease in the left tibia. The leg was somewhat swollen, the foot very much so, livid, and oedematous. In various parts of the leg, and opposite the inner ankle were ulcerated openings, leading to carious bone. There were some symptoms of disease within the ankle-joint, but they were slight and indistinct—there appeared, also, to be a slight sub-luxation of the head of the tibia backwards, on the condyles of the femur, although there was no sign whatever of disease in the knee. The disease had commenced suddenly five months previously, without any obvious cause, save that the boy had been in the habit of dabbling about with his feet in the water for some time before he was laid up. He was first attacked with pain on the inside of the ankle, increased on motion—then came swelling of the joint, and the ulcers over the tibia appeared at various intervals. He was ordered a generous diet and quinine, but there being little alteration by the 24th, the limb was on that day removed above the knee. On examining the amputated leg, it was found to present a good specimen of necrosis of the tibia, in several of its stages. The periosteum was red and thickened—new bone laid down to some extent—the old in some places unaffected, in others yellowish and opaque—in others, again, dead, and separating to form the future sequestra. The cartilages of the ankle-joint were destroyed by ulceration—the knee quite sound. On the same day on which this patient had his limb removed, another suffered amputation of the leg by the same surgeon, Mr. Brodie, and both, after the operation, were placed in the same ward, indeed, in opposite beds.

For the first few days, Cooper, whose case we are relating, went on but indifferently—there was great irritability—brown tongue—pulse at 120. On the 4th day, the stump was dressed, and had not a very promising appearance. The tinct. benz. c. was applied to it, and, on the 30th, (6th day) it looked somewhat better. From this time he certainly improved, having lost a good deal of his irritability, but the stump was a bad one, the flaps having retracted, and the bone sticking out. On the 2d May, he was ordered bark and full diet, and appeared

to be doing well. On this day, however, or the next, the other patient who had been operated on, and lay in the opposite bed, died; and from this instant the most decided change was observed in Cooper. The irritability was increased tenfold—the pulse became small and extremely rapid—the countenance sunk and anxious—tongue dry, and reddish at the tip—mouth parched—bowels purged. He was ordered port wine, with sulphate of quinine in dilute sulphuric acid; tincture of orange peel, and tincture of opium. On the 7th, he appeared almost moribund, and was harassed with a violent purging. Chalk mixture was ordered, and port wine, eggs and brandy, &c. given with a liberal hand. On the 8th, the purging had ceased, but the chalk mixture had been carried on, by mistake, to a much larger amount than was required. He could take no solid nourishment, and was in a very hopeless state. On the evening of the 11th, he died.

Dissection. Matter was found burrowing between the muscles of the stump, and running up in the cellular membrane surrounding the great vessels. The marks of recent inflammation were discernible in the chest, and superficial abscesses in the lung.

There being no trace of the thoracic inflammation during life, or at least the symptoms, if they did exist at all, being so obscure as to escape notice, shew that this was one of those cases of insidious inflammation of the lungs, which sometimes occur after great operations or injuries.

3. *Gangrene after simple Fracture of the Leg—Depletion employed—successful Issue of the Case.*

Henry Wake, æt. 53, was admitted into St George's Hospital, May 1st, under the care of Mr Brodie, with simple fracture of the left leg, about its middle. The tibia alone was broken, the fibula remaining sound, but there was another fracture into the knee-joint, which was also a simple one. The leg was put up in junks, and next day there was found to be much swelling and tension of the limb, together with discolouration of the integuments about the seat of the fracture, and vesications filled with bloody serum. The pulse was full and quick,

but the limb was of its natural temperature, and the constitution very little affected. The junks were removed, and the leg laid out upon a pillow without either splint or bandage. Next day the vesications had increased. V. S. ad 3x—salines with sulphate of magnesia—cold lotions.

4th. Whole limb swollen up to near the groin, and of a yellow bilious tint—foot and lower part of leg œdematous—vesications very large and black—great discolouration. The pulse is full and has an extraordinary degree of force, but otherwise the constitution appears unaffected. Blood drawn yesterday a little buffed. On the 5th, he was much the same, and the bleeding was repeated, whilst the proportion of spirit in the lotions was increased. The blood drawn was cupped and buffed, but on the 6th he was considerably improved, the vesications being broken and collapsed—the discolouration fading. From this period the patient went on well.

This is an interesting case, first, as shewing that peculiar disposition to gangrene which sometimes follows injuries, and secondly, as proving the good effects of blood-letting in a case, in which *a priori*, one would be disposed to dread its use. The patient, however, was of a bloated habit, and this, with the full and bounding pulse, were pretty fair indications of the treatment to be employed. The absence of constitutional symptoms throughout is certainly remarkable.

4. *Chronic Inflammation of the Testicle.*

It is well known that not many years ago it was the custom to remove testicles for an affection which is now cured daily by the use of mercury—we mean the chronic inflammation of the organ. The following is a case of this kind.

Thomas Nibbs, æt. 22, a healthy looking brickmaker, was admitted into St. George's Hospital, April 9th, 1828, under the care of Mr. Brodie.

In the course of last Summer, he says he fell into a well when in a state of intoxication, and next morning found the left testicle swollen and very painful. He was obliged to lie up for two or three days, but then, the swelling having in some measure subsided, he went to work again, and has gone on from that time,

sometimes better and sometimes worse, up to the present period. He had a gonorrhœa three years ago, but had entirely recovered from it previous to his meeting with the accident. He has never had stricture, and always enjoyed good health.

The present symptoms are—left testicle nearly double its natural size, and uniformly hard, except at its anterior and outer part, where it is somewhat softer, and pressure gives the sensation, as if the testis itself were touched. There is, on the whole, little pain on pressure, though one point on the inner side is both more prominent and more sensible than the rest. The shape of the enlarged testicle is very much like that of the heart, but on the upper part, corresponding to the basis of the triangle, there is superimposed a globular swelling, having a distinct fluctuation, and apparently a collection of fluid in the upper part of the tunica vaginalis. It cannot be pressed up through the ring—the cord is healthy. April 11th, he was directed to take three grains of the blue pill thrice daily, but on the 18th, this was changed for two grains of calomel and half a grain of opium. Under this treatment the gums soon became slightly affected, and the tumour diminished in size. On the 1st of May, the fluctuating swelling at the upper part of the tumour was punctured, and about a table-spoonful of fluid evacuated. On the 7th May he was so far improved as to be made an out-patient.

This case shows that even at the "ninth hour" mercury has a very powerful effect on these chronic enlargements of the testicle. The disease had existed for many months, and it was feared at first that the structure of the organ was too far altered, to be benefited by any remedial means. The event fortunately proved otherwise.

83. CALOMEL AND OPIUM IN INFLAMMATION.

Dr. Yeats lately read a paper on this combination, at the Royal College of Physicians by which it appears that this observant physician was among the first practitioners in this country who endeavoured to introduce the above remedy into general use as an important aux-

iliary—in many cases a substitute, for venesection. How long it is since mercury was first employed in the East Indies for the cure of hepatitis, we cannot pretend to say. The first printed account of the remedy that we have been able to obtain is given in the third volume of the Medical Museum (1764) by a surgeon from India; and the next account is by the late Dr. Hamilton of Lynn Regis, who published a paper in Duncan's Medical Commentaries for 1785. Dr. H. informs us that, at the close of the year 1764, the fleet which returned from the East Indies, "brought a worthy surgeon of the navy to England, who had served in that country for eight years." "By this gentleman I was informed that the established method of curing the hepatitis, or endemical inflammation of the liver, incident more particularly to Europeans, was by mercury." After describing the method employed in India, Dr. Hamilton goes on to inform us that he tried the same remedy in the bilious autumnal fevers prevailing about Lynn, and found it very successful, especially when combined with opium. This success led him to an extension of the remedy. "The efficacy of mercury, says he, in ophthalmia, had long been established." "I considered that the general cause (be what it may) of an inflammatory diathesis, must be the same, whether the inflammation is seated in the meninges, pleura, lungs, liver, diaphragm, or any other internal part; and therefore the circumstance of the locality could make little or no alteration in the general intention of cure." This reasoning he forthwith applied to practice—and peripneumony being the first disease that fell under his care, after this resolution was taken, so it was the first species of inflammation in which calomel and opium was administered. The reader is aware that Dr. H. met with great encouragement.

"I was successful in a great number of cases, and under a variety of circumstances. I have had the satisfaction to see women far advanced in pregnancy, in a manner rescued from death, in the last stage of the peripneumony, by calomel and opium, after every other means,

* This refers to the account in the Medical Museum.

which had been tried, had failed in relieving the patients. I had the pleasure afterwards of seeing them go their full time, be safely delivered of living children, and enjoy the happiness of bearing several others since that period. I have known many a life saved in the symptomatic, variolous and morbillous peripneumony, by these medicines; and I never saw any remedies afford so certain and speedy relief in obstinate dry catarrhus coughs, as those, particularly when continued until the mouth became affected by the mercury. The same means have proved equally efficacious in pleurisies. But the most extraordinary and early relief I ever saw calomel and opium give, was in the phrenitis and paraphrenitis, which has been repeatedly experienced in a great number of cases. Inflammations of the intestines, and other parts within the abdomen, have most readily yielded to this treatment."

In puerperal fever, angina, acute rheumatism, gouty inflammation, &c. Dr. Hamilton derived great assistance from the combination in question. His plan was, first to take blood, "in quantity proportioned to the violence of the inflammatory symptoms, and the age and constitution of the patient." Then he cleared the bowels, and afterwards administered the calomel and opium till the mouth became sore, or the symptoms yielded, occasionally interposing general or local bleeding, if the disease was obstinate.

Several writers, among whom we need only mention Lind and Clark, afterwards gave their testimony towards the efficacy of calomel and opium in certain inflammatory complaints. And then comes Dr. Yeats, who, in the year 1802, published a paper in the 7th volume of Duncan's *Annals of Medicine*, on the same subject. Dr. Yeats informed the audience that he was led to the use of this remedy by chance, and not by design. He gave a dose of calomel to a patient labouring under ophthalmia, intending the next day to have the vessels of the conjunctiva divided. The medicine instead of purging, salivated the patient, and cured the inflammation. Dr. Y. then extended the practice to other inflammations—and, as far as we can perceive, precisely under the same rules and restrictions as Dr. Hamilton laid down so long before.

At the close of the paper, Dr. Yeats made some judicious observations on the danger of exhibiting mercury in scrofulous and bad constitutions, lest the remedy should prove worse than the disease.

We have not the smallest doubt that the medicine under consideration, would prove equally as effectual in other inflammations as in those of the eye, the liver, and the heart. But we are satisfied that this remedy will never come into general use for inflammation of the lungs, pleura, and many other internal parts, for two reasons:—first, because the inflammations of these structures are not very suddenly fatal, generally speaking:—secondly, because they are, for the most part, curable by the other antiphlogistic means, without the risk of salivation. When Dr. Yeats or any other man tells us to go on with mercury till we gently affect the mouth, but never to induce salivation, we wonder that clinical observation did not teach them how difficult this rule of practice too often is. How frequently do we find that mercury, when pushed on briskly, as it must be for the cure of an internal inflammation, runs to the mouth and produces violent salivation in spite of us? When giving mercury slowly, for a syphilitic or chronic complaint, we have some control; but in acute diseases, if we give it with the view of exciting constitutional effects, we must lay out our accounts for *Salivation*, whatever care we take. This event, which all practical men are aware of will prevent, as we said before, the remedy from coming into general use. But where the eye, for example, is deeply inflamed, and vision is endangered, then men will run the risk of salivating rather than bleeding their patients. So, in the East Indies, if acute hepatitis does not give way readily to antiphlogistics, practitioners are aware that suppuration quickly ensues, and therefore they give mercury at the risk of even profuse pyæmia. In inflammation of the heart who would balance between death and salivation? But considering the outcry that is made against mercury, both by medical men and the public, we do not wonder that practitioners should only have recourse to an active administration of that remedy, when the life or some important function of their patient is at stake.

84. NEW METHOD OF TREATING AMAUROSIS.

M. Majendie having previously proved by experiment that the concurrence of the nerves of the fifth pair, are as necessary to vision as that of the optic nerves, supposed that amaurosis might sometimes arise from a paralysis of the first of these nerves, and that by powerfully exciting them, we might produce advantageous results. Being satisfied that these nerves might be punctured with impunity, and having remarked that the pupil was contracted whenever he pricked either of the orbital branches of the fifth pair, he passed one needle into the frontal nerve, and another into the superior maxillary, and connected each with one of the poles of a voltaic pile. In a case of amaurosis of one-half of the retina, accompanied with paralysis of the superior eyelid and some of the muscles of the eye, in three months the retina and muscles of the eye were restored to the performance of their healthy functions.—*Journal des Progrès*, Vol. IV.

85. SIGNS OF THE TIMES—BRIGHTENING PROSPECTS.

Non semper imbres nubilus hispidos
Manant in agros; aut mare caspium
Vexant inæquales procellæ
Usque.

It was but a very short time before the downfall of Napoleon that men began to think the war between France and England interminable—at least on any other principle than that of extermination. "*Delenda est Carthago*" was the motto! Yet a premature fall of snow—a depression of the mercury in the thermometer, totally changed the scene—the voice of war was hushed—Bellona no longer thundered on the field—the Gallie Cock and British Lion embraced—and Europe was in profound repose! So again, it is only a few short months, we might say weeks, since the profession of physic in this country, exhibited a scene of anarchy, animosity and intestine war, that threatened a dissolution of all those bonds and ties by which medical society is held together. Now, how changed is the

scene! The stormy passions are allayed—the lion is seen feeding with the lamb—the vulture and the dove fly peaceably together—scandal has become a drug—abuse is out of fashion—and—however incredible it may appear—a certain weekly Journal is as decent as it is dull! To crown the whole, we understand that a once celebrated orator and reformer means to call a meeting of the profession at the FREEMASON'S TAVERN, in order to celebrate, with due libations, the return of PEACE, AMITY, and LIBERALITY among all ranks of medical society!

Hic dies, anno redeunte, festus
Corticem astrictum piceo dimovebit
Amphoræ fumum bibere institutæ
Consule Tullo
Sume, Mæcenæ, cyathos amici
Sospitis centum; et vigiles lucernas
Profer in lucem:—procul omnis esto
Clamor et ira.

It might not be uninteresting to trace the causes of this apparently sudden revolution in the minds of men. These causes have been long in operation, though their effects have only recently become conspicuous. One great cause is the loss of that attraction which led on vituperation to the summit of success. No passion of the human mind, however strong, and however deeply rooted in our nature, can bear constant and long-continued excitement. It must become sated, and disgust soon follows. Happily for the peace and prosperity of medical society, the attraction of scandal, like the attraction of the moon, has passed the zenith, and ceased to raise the tide of evil passions. Attraction withdrawn, gravitation necessarily comes into play, and the tide will roll back to its source with much greater velocity than it advanced.

It becomes the bounden duty—and not less the duty than the interest, of every medical man, to foster and promote this return of amity and peace in a liberal profession, by cautiously abstaining from every act or expression that can engender bad feeling—and by leaving the agitators to their own precipitate and natural descent into the ocean of oblivion. No other impetus is necessary than the GRAVITY which is inseparable from evil deeds and dark designs.

HOSPITAL PRACTICE.

86. CASES INTENDED TO ILLUSTRATE THE APPLICATION AND UTILITY OF THE STETHOSCOPE. By RICHARD TOWNSEND, M.D. Medical Inspector of the House of Industry. [Dublin Transactions, Vol. V.]

The object of Dr. Townsend's report is to prove that "auscultation is capable of affording an extraordinary degree of precision in recognizing and distinguishing the most complicated forms of pulmonary disease—and that such information necessarily leads to practically beneficial results." Dr. Townsend does not conceal his mistakes; but candidly attributes them to carelessness or incorrectness on the part of the auscultator, rather than to faulty principle in auscultation itself. Independently of the stethoscope, however, the cases here detailed are pathologically interesting, and being authentic documents from public institutions, are the more valuable on that account.

Case 1. On the 25th March, Dr. T. visited, at the request of Dr. Cheyne, a tall dragon, aged 30, then in the Royal Infirmary. His complaint had commenced in the preceding October, with cough, pain in the chest, and diarrhœa; for which he was bled, blistered, &c. The disease frequently recurred, and was as frequently treated in the same manner. When visited, he was walking about the room, but was easily put out of breath, and was emaciated. Had profuse night-sweats; diarrhœa; thirst; pulse 120, small and vibrating—respirations 30 in the minute—sputa apparently mucous, and reported to have diminished considerably within the last three weeks, during which period the dyspnœa had increased.

"On viewing the thorax, the right side appeared considerably more dilated than the left, especially anteriorly and laterally, at its lower half. Percussion employed over the dilated surface elicited a clear hollow sound. In this space too the respiratory murmur was perfectly inaudible; but immediately after coughing, a peculiar sound, resembling the vibrations of a porcelain jar, when gently struck, (*tintement métallique*,) was distinctly heard in a space corresponding to the posterior convexities of the sixth, seventh, and eighth ribs. This sound was not produced either by inspiration or speaking.

"Succession did not produce the sound of fluctuation, although the patient said he felt water dashing against his side. In the superior part of the same side of the chest (the right) the dilatation was scarcely, if at all perceptible. The sound, on percussion, not particularly sonorous, and the respiratory murmur audible posteriorly.

"At the left side the sound on percussion was natural, though considerably duller than at the right. Respiration was distinctly audible all over the lung's surface, except in the space corresponding to the superior lobe, where cavernous respiration and cough, with perfect pectoriloquy, were heard distinctly."

DIAGNOSIS. A tubercular cavity in the upper lobe of the left lung. The dilatation of the right side of the chest is produced by pneumo-thorax—the air in the cavity of the pleura proceeds from a communication between the bronchia and that cavity, as proved by the co-existence of the *TINTEMENT MÉTALLIQUE*. The medium of communication is conceived to be a tubercular cavity. The detailed diagnosis, of which the above is the substance, was written down, and given to Dr. Cheyne, on the evening of our author's first visit.

On the 1st of April we find the report as follows:—

"Pain of the left side removed by the application of a blister; dyspnœa increased; number of respirations 38; diarrhœa; profuse night-sweats.

"At the right side, sound on percussion is become dull posteriorly in the space corresponding to the inferior portion of the thoracic cavity, where no sound whatever can be heard. *Fluid accumulates*. Above the eighth rib the sound on percussion is hollow, the ordinary inspirations sound like blowing into a bottle. Expiration is followed by a musical sound, resembling the vibrations of a fine wire chord. Coughing produces a peculiar sound, exactly similar to the ringing of a porcelain jar; the voice much more obscurely so.

"On making the patient sit up in bed, and shaking him gently by the shoulder, (the Stethoscope being applied posteriorly about the convexity of the seventh rib,)

a fluid is clearly heard dashing against the sides of the thorax.

"The patient is sensible of this fluctuation, says *he* hears it, though *I* could not without applying my ear. When he suddenly rises from the recumbent posture, three or four drops are heard to fall successively from above on the surface of a fluid. This sound also is most distinctly heard over the seventh rib posteriorly.

"In the left lung, pectoriloquy, &c. as before.

"Feels no pain whatever in right side. I, in consequence, added to my former diagnosis, that the constant absence of pain probably proceeded from a thick coating of albuminous exudation, the product of chronic inflammation, which lines the pleura, and defends it from the contact of the air."

5th April. The thorax is more distended—all the intercostal spaces are protruded—signs furnished by auscultation and percussion the same as before, and they were verified by Drs. Brown and Graves, who carefully examined the patient.

11th April. Emaciation and debility progressive—night-sweats—stethoscopic sounds as before, except that they are now heard anteriorly, as well as posteriorly, and as high as the third rib. Below the 7th rib, the sound on percussion, is dull, and the respiration extinct.

"I think it right to mention, that though I employed the Stethoscope to ascertain the precise relative situation of the air and fluid, yet all the sounds above recorded were incomparably more evident to the naked ear."

Death terminated the scene on the 14th April, and the following are the minutes of dissection, made in the presence of Drs. Cheyne and Stack.

* We have been in the habit of almost daily employing the naked ear and the stethoscope, for seven or eight years past, and of estimating them comparatively. The results of our experience are in perfect consonance with the observation recorded in the above extract. Several of our friends, however, give a decided preference to the stethoscope; and although they can give very ingenious acoustic reasons for their preference, yet we cannot allow argument to predominate over the evidence of our own senses.—*Rev.*

"*Thorax.* The right side. A trocar was introduced between the fifth and sixth ribs near their junction with their cartilages; an immediate rush of air followed, part of which I succeeded in collecting in a large phial filled with water, and inverted over the canula.

On removing the sternum, a vast unoccupied space was observed in the anterior part of the thorax, capable of containing fully two quarts of water. This space had been occupied by air, which may consequently be estimated at that quantity. The lung just appeared above the surface of the fluid, which occupied the posterior region of the thorax; it was closely compressed against the spine, and seemed reduced to one-third of its natural dimensions. The fluid effused might be in quantity about two quarts, was of a yellowish green colour, tolerably clear at its surface, but rendered turbid at bottom by numerous fragments of opaque, puriform flocculi of albumen.

"Before touching the lung, in order to guard against an accidental formation of the opening, which I expected to find, an incision was made into the trachea, and the pipe of a pair of bellows introduced. The air passed freely through the lung, and appeared in bubbles at the surface of the fluid, in which it was immersed.

"The fluid being removed, the upper lobe of the lung was found in close contact with, and firmly attached to the costal pleura.

"The whole surface of the lung, except where it was attached, was coated with an albuminous exudation of a dirty white colour, of several lines thickness, its surface wrinkled, not unlike the rind of a shrivelled apple. The costal, mediastinal, and diaphragmatic pleuræ, were still more thickly coated with this exudation, which, though firmly attached to the subjacent pleura, and apparently incorporated with it, might, by careful dissection, be separated from it, leaving the membrane underneath in a state of perfect integrity.

"The lung was now detached; on its anterior surface, about two inches from the summit of the upper lobe, was discovered a fistulous orifice, capable of receiving my little finger, its margin well defined, rounded, and nearly cartilaginous. A probe introduced passed readily

through a series of small tubercular cavities into one of the principal bronchia. At intervals of half an inch below this fistulous orifice existed three small oval superficial ulcers, which, on close examination, did not appear to communicate with the bronchia. They were evidently formed by softened tubercles, developed immediately under the pleura; for on different parts of the lung's surface there were several similar oval nests of tubercles, some not yet softened, others quite soft, and elevating the pleura, through which they had not as yet formed a passage.

"Posteriorly near the root of the lung, and about the base of the superior lobe, immediately underneath its adhesion to the pleura, was another fistulous opening, of half an inch in diameter, which communicated by a long sinuous passage with a large tubercular abscess occupying nearly the whole upper lobe. This passage was lined all through by a highly vascular membrane, exactly similar to that which lined the tubercular abscess, having its surface coated with a layer of lymph. Into this vast abscess was also traced one of the principal bronchial divisions; its entry into the cavity was within a few lines of that of the sinuous passage above described.

"The middle and lower lobes contained several tubercles. The bronchial glands also were much enlarged, and studded with tubercles.

"The left side of chest. This lung was studded throughout with granular tubercles of the size of duck-shot. In the superior lobe was found one cavity, capable of containing a large filbert, and communicating with two or three smaller ones. In the middle lobe the tubercles were all opaque and whitish. In the inferior many of them were in the first, or greyish, semi-transparent stage.

"The heart was small, flaccid, and pale."

The inferior margin of the liver descended to the crest of the ilium—mucous membrane of the stomach reduced to a pulpy mass, which was easily scraped off with a scalpel. There was ulceration of the ileum near the cæcum.

"This case of pleurisy with pneumothorax, differs from any other that I have seen recorded, in the total absence of pain in the side affected, in not having

its commencement marked by any violent or sudden symptoms of dyspnoea or pain, and also in this, that the patient was able almost to the time of his death to dress himself and sit up; whereas M. Laennec expressly states, that in all the cases which he had seen, the patients were excessively oppressed, and unable to quit their beds. Indeed he lays down these circumstances, as adjuvant diagnostic marks, whereby to distinguish this disease from emphysema. But in this instance such minor distinguishing features were not necessary. The great distention of the right side of chest, its remarkable sonority, the total absence of respiration, unless where the lung was attached, the extraordinary development of the pathognomonic signs, all established, beyond the possibility of doubt, the precise nature of the disease. I shall only add, that the dull sound supervening inferiorly, and gradually ascending, the increasing capacity and sonority of the superior part of the thorax, together with the increased extent of surface over which the pathognomonic sounds were heard, did all, and each of them, mark exactly the progress of the disease from day to day, up to the period of its fatal termination."

The lung, preserved in spirits, was presented to the Association, when the paper was read.

We shall take occasional opportunities of presenting to our readers several other interesting cases, recorded in this communication, as they are all insulated cases, and not necessarily connected by any inseparable links. But we cannot help advert, in this instance to the contrast between the Dublin and London practitioners, as presented in the reports from public institutions. On this side of the Channel, (with few exceptions,) *Plutus*, and not *Apollo*, is the god of idiatry, before which the physician and surgeon prostrate themselves, morning, noon, and night! Speaking generally, every one of those muscles which contribute to the expression of an exquisite *sneer*, is thrown into rigid contraction, the moment that any pathological enquiry, beyond money making routinism, is broached! *Post-mortem* investigations are shunned, as taking up that time which is more profitably employed in manœuvring and drugging the public—

auscultation is voted to be not merely a bubble, but a *bore*, that requires study, in a science where no other study *ought* to be introduced or cherished, but that which enables the doctor to make the most money in the shortest space of time—every improvement in diagnosis is assailed even through the medium of the PRESS, by every species of obloquy and ridicule—while ROUTINE EMPIRICISM becomes the order of the day! Look at the cases published in our journals by private practitioners—and the reports from hospitals. Almost all are trying to cure diseases which they *do not know*—while very few indeed are trying to know those diseases which *cannot be cured*. It will be said that, “it is of little use to have a very accurate knowledge of those changes of structure that are beyond the reach of art.” Nothing is more false, nothing more injurious than this sentiment. It is the duty of medical men to *mitigate* sufferings where they cannot remove the cause—to *prolong* life, where they cannot ultimately save it. These duties cannot be performed without an accurate knowledge of pathology—that is, without knowing the deviation from sound structure, *while the patient is living*. For want of this knowledge, thousands are daily injured and their lives curtailed by active measures and the exhibition of potent drugs, under the idea that diseases are functional or curable, when they are organic and incurable—consequently where nothing but the mildest means should be used for their mitigation. This we know is unpalatable doctrine for the routine practitioners; but the “march of intellect,” beyond the pale of medicine, is enabling the public to look over the walls of colleges, hospitals, and all those places formerly sacred to the *art* and *mystery* of physic. We are greatly deceived if medical men be not forced, not merely to keep pace with the progress of knowledge generally, but to keep their own science in *advance*. Nothing but the most unwearied exertions, the most unconquerable zeal can enable them to effect this object. Self-love, and some other passions, which shall be nameless, will raise an outcry against these sentiments, as illiberal, and as depreciating our dear country. But no clamour of this kind shall deter us from doing what we conceive to be our duty.

87. HOMICIDAL AND INFANTICIDAL MONOMANIA.

The following melancholy and remarkable cases are recorded by Professor Outrepoint of Wurtzburg, in a late German Journal.

Case 1. The individual was a surgeon who had served in several campaigns against the French, and who afterwards studied midwifery under the aforesaid Professor. He always appeared of a lively and cheerful disposition, till certain pecuniary matters ruffled his temper and rendered him thoughtful and melancholy. He was now frequently observed to be studying the Scriptures, and reciting passages from the Bible. He was happily married, and had four children. One morning he summoned his wife and children into the court-yard of his house, and there informed them that it was his intention to destroy them all, and afterwards himself! He descanted coolly on the propriety of homicide, and told his wife she must first be a spectatress of the destruction of her children, and then her own turn would come. The woman appears to have been possessed of great presence of mind, and acted with great prudence on such a trying occasion. She entirely coincided in the justness of her husband's sentiments, and cheerfully agreed to the proposed tragedy. But she appeared suddenly to recollect that it would be proper for herself as well as her children, to confess and take the sacrament, previously to appearing before their final judge—a ceremony which would necessarily require several days preparation. The monomaniac replied that this was a reasonable and proper procedure; but, in the mean time, it would be absolutely necessary that he took some person's life that day. For the purpose of effecting this, he instantly set off for Salzbourg. His wife, having placed the children in security, made the best of her way to the above-mentioned town, and went directly to Professor O. the friend of her husband, for advice. The monomaniac had already been there and not finding the Professor at home, had gone away. The woman now recollected, and told the Professor that her husband had threatened his life, for some imaginary slight which he had experienced; but, at that time, she thought

he was in jest. About mid-day, the monomaniac came back to the Professor's residence, and appeared quite calm and peaceable. The Professor invited him to go and see the hospital of the town, where he had a curious dissection to make, and they sat down to eat some refreshments before proceeding thither. At this repast the monomaniac informed his host that he had lately been most immoderately disposed to commit homicide—and that he had actually murdered a peasant that morning on his way to the town! He confessed also that he had entered a coffee-house for the purpose of committing a second act of this kind, but had been diverted from his purpose. The murder of the peasant was a fiction, as was afterwards proved. The Professor now turned the discourse to other subjects—and on all other topics, the monomaniac was perfectly rational. They now set off for the hospital, and in their way thither, the monomaniac met with an old acquaintance and fellow-campaigner. While they were greeting each other, the monomaniac suddenly struck his friend a violent blow on the pit of the stomach, exclaiming, in a burst of laughter, that he had done for him, as he had hit the *cœliac plexus*! The Professor reprimanded him in strong terms for this dishonourable and cruel act, at which the monomaniac was much surprised—and informed his preceptor that he was irresistibly led to commit homicide, and cared not who was the victim of this propensity. The Professor now asked him somewhat tauntingly, if he had not a design against *his* life? The monomaniac acknowledged it; but added that he had sufficient control over himself to prevent the destruction of his benefactor. The Professor took his arm, and they proceeded to the hospital, where the monomaniac was immediately confined. He almost instantly became furiously maniacal, and, in a few months afterwards died.

Another case is related by the same author, which merits the attention of the medico-legal inquirer.

Case 2. A female who was received into the Lying-in-hospital, to which our author was chief accoucheur, requested a private conference with the doctor previously to her accouchement. She ap-

peared in a state of great agitation and embarrassment, and presented many of those phenomena which usher in the *mania post partum*. When the attendants were all withdrawn, she begged earnestly that Dr. O. would not leave her in the same chamber with other women and their infants, as it would be utterly impossible for her to resist the propensity she felt to destroy the latter. Her request was granted, and she was very attentively watched. Her delivery was easy, and the child was kept from her, and afterwards sent to her mother. The young woman on leaving the hospital, went as a servant in the town, and would not return to her mother's house, lest she should be tempted to destroy her infant. She declared that the sight of a very young infant kindled up an irresistible propensity to destroy its life. This young woman was a peasant, who had been seduced, and who had never led a dissolute life, or was, in any way, of corrupt manners. She had not received any reproaches or ill treatment from her parents, during pregnancy—nor was there the least cause for anxiety on account of the child, as her mother had engaged to provide for it. In fact, our author could discover no tangible cause for this infanticidal disposition. She entered into the service of a clergyman, and enjoyed good health. Some time afterwards our author questioned her on the above subject, and she informed him that she had nearly lost all propensity to infanticide. We have no doubt that it is in this way many cases of infanticide occur, where verdicts are given against the mother by an ignorant and prejudiced jury.

88. CLINICAL REPORT ON FEVER. By Dr. Jackson, Physician to the Philadelphia City and County Almshouse.

We are rejoiced to see that our transatlantic brethren are eagerly encouraging the publication of hospital-reports. The plan which we have so often recommended, (as pursued in Paris) of delegating the task of reporting to some able and competent pupil, is pretty generally adopted, as far as we can learn, in the United States; and we wish it every

success. We select the present report, published in our highly respected contemporary, (the *American Journal of the Medical Sciences*) for a short article, as it exemplifies the progress of the doctrine of Broussais beyond the Atlantic. The fever here reported on, occurred in the months of August, September, and October of 1827. The patients were chiefly newly arrived emigrants from Ireland, "who were generally persons of temperate habits and good constitutions"—and the character of the disease was, no doubt, considerably modified, if not produced, by the changes in diet and modes of life of the sufferers. From food consisting chiefly of potatoes, oatmeal, and butter-milk, the emigrants were unavoidably put on salted meat, during the voyage, and they indulged in substantial animal food meals after their arrival in America. The autumnal season also contributed to the production of the disease. "This fever" says Dr. Jackson, "was a gastro-enteritis, with meningeal or other complications." The cases detailed from the hospital-books, (and they are very numerous) certainly shew that the mucous membrane of the stomach and bowels was the chief seat of the disease, and the treatment consisted, almost uniformly, in local depletion by leeches, starvation, diluents, and antimonial diaphoretics. When the inflammatory irritation was propagated to the brain or its meninges, the local depletion was carried to the head or neck, and so on, according to circumstances. The following extract contains many sensible observations, and will enable our readers to form a very good idea of Dr. Jackson's views and practice. We recommend it to the especial attention of those who are deeply imbued with the Hamiltonian and Abernethian doctrines in this country—admitting, at the same time, that the practice of drastic purgation is much less detrimental in northern than in hot climates, because the head is more frequently the seat of inflammatory action in the former than in the latter countries.

"The preceding cases recorded by R. L. FEARN, student, are examples of common remittent fever or gastro-enteritis, so common in the commencement of warm weather. They manifested cerebral symptoms, the invariable concomitants of acute gastric inflammation. The

cerebral sympathetic irritation did not acquire an intensity sufficient to become independent of the gastric inflammation in either case. In Mary, on the first of August, the cerebral symptoms rapidly increased, and the irritation of the arachnoid and pia mater threatened to take the lead in the train of morbid phenomena. The application of leeches along the jugulars, and around the base of the head gave an immediate check to this complication.

"The prescription directed in both cases previous to my visit to the patients, though a common formula in fevers was discontinued, that the existing inflammation of the mucous tissue of the stomach and intestines might be attacked by the most direct and appropriate means. That formula is certainly far preferable to the active and drastic cathartics frequently resorted to, and the employment of which has been so much misapplied and abused since the publication of Hamilton's work on Purgatives. Still its immediate direct mode of operation is that of an irritant to the surface to which it is applied. This irritation it is true, under common circumstances generally produces secretion from the exhalant vessels and mucous follicles of the mucous tissue of the intestines, and a purgative operation is the consequence. This irritation and secretion are the essential element in the action of a purgative. But it is a well demonstrated fact, that an irritant applied to an irritated surface, will as frequently dry up and prevent secretion as excite it.

"Purgatives in the acute stage of fevers attended with inflammation of the gastro-intestinal mucous tissue, when they do excite copious secretions, counteract their own injurious tendency, and often arrest or diminish the inflammation of this membrane, when it is not deeply radicated or extensively diffused. It is, however, in the experience of every practitioner, that active purgatives in fevers frequently fail to produce evacuations; they cannot bring forth secretions from a highly inflamed surface, whose actions transcend the point at which secretion can take place. The irritation of the purgative, under such circumstances, is added to that already existing, and all the symptoms are aggravated.

"The excitement of secretions and

evacuations by purgatives in fevers very frequently, instead of alleviating the condition of the patient, renders it much worse. It is not uncommon that an apparent amendment will ensue from very free, copious, intestinal secretions procured by purgatives, for twenty or more hours, to which succeeds an aggravation of the precursory symptoms. The depletion operated in this manner on the general circulation, serves temporarily to tranquilize the sympathetic irritation of the central organ of the circulation; and in consequence, the febrile symptoms—frequency and force of pulse, heat of skin, &c. depending on that condition of the heart, are for a short period abated. The symptoms of the local irritation may for a time be smothered from the extent of the evacuations, but they break forth with increased violence.

“The administration of active purgatives in fevers, often proves injurious, by rendering extensive a morbid irritation which may be very limited. The purgative, irritating zone after zone of the mucous coat of the alimentary canal, as it passes along, becomes a conductor of the inflammation, restricted primarily to a small portion of this structure, and spreads it over nearly its whole surface. In the tegumentary tissue of which the digestive mucous membrane is a part, erythemoid inflammation, as it is called, has a strong disposition to propagate itself, even without a provocative. From this cause, those labouring under fevers, who are treated by drastic cathartics or other irritants, have the abdomen to become tumid, hard, painful to pressure, tympanitic—to be meteorized as these collective symptoms were formerly designated; the bowels are costive, and very little flatus is discharged. Here the inflammation has not passed beyond the ileo-cæcal valve and penetrated into the large intestines. This does occur, however, sometimes, and then is added to the foregoing symptoms, a diarrhœa with varied discharges of different hues and appearances; brown, white, black, and bloody, and involuntary stools, according to the intensity of the inflammatory action. When purgatives and other irritants of the gastro intestinal mucous membrane are abstained from, or but sparingly employed, these symptoms are of very rare

occurrence, in fevers, even of a high grade of action, and which may prove fatal by the disorganization of the mucous membrane of the stomach, effusion on the brain, &c.

“From these principles I have adopted the practice, the oldest in medicine, and if authority be entitled to consideration, sustained by the weightiest in our profession, of abstaining generally from purgatives in the commencement of acute fevers, and of combatting, by directly debilitating remedies, the excessive actions in the tissues in which they are located. From a comparative experience of several years practice on both systems, I am daily more convinced of the superiority of that I now pursue. Those cases of fever, in which the capillary irritation is of a light grade, or a limited extent, and in which purgatives prove successful remedies, the unmixed, positive antiphlogistic treatment, established on anatomical and physiological principles, will be found in the great majority to be more speedily cured, without the slightest risk being incurred of converting them into more formidable affections.”

We are convinced that there is much good sense and solid practical observation in the foregoing remarks. The report embraces a great variety of complications in this fever, but the principles above stated were uniformly acted on, and the success appears to have been as great as could possibly be expected under existing circumstances.

89. M. LASSERE ON CANCER OF THE FACE.

Of all the ills “which flesh is heir to,” none, perhaps, are of such a melancholy nature as cancer; a disease most racking to endure, afflicting, and even disgusting to witness, and too often setting at defiance the best directed efforts of medical or surgical skill. M. Lassere, the author of the case we are about to notice, congratulates himself on the success which has attended the *medecine physiologique* in this unhappy malady, but we fear that on the Continent, a greater latitude is

given to the term, *schirrhus*, than in this country, and a too easy credence lent to instances of cure.

Case. Adrien Chabaunes, æt. 19, in the month of March, 1822, had a molar tooth extracted. A good deal of difficulty was experienced during the operation, and the alveolar process and gum were much injured. Inflammation of the mucous membrane of the mouth followed, and was relieved by astringents, but the gums remained swollen, and bled frequently. Small pustules also formed, especially on the upper lip; and, towards the end of May, one of these became very painful, and degenerated into an ulcer. A young physician who was consulted, prescribed soothing applications, but the ulceration spread, attended with excruciating pains, and in the month of August, our author was called in. At this time, the ulcer extended from the margin of the upper lip to the septum nasi, and nearly half an inch on either side; the surface being of a dirty red colour, the edges hard, irregular, everted, and exceedingly painful to the touch; the lip swollen, the surrounding parts inflamed. The discharge consisted of an offensive mixture of blood and pus, and hæmorrhage took place at each dressing from the edges of the wound. Within the ten days previous to M. Lassere's visit, he was informed that the disease had increased upwards of a third; the *morale* was affected, the pulse small and frequent.

Our author considered the case as one of cancer, and drew a gloomy prognosis in consequence; however, he ordered eight leeches to be applied on each side of the ulcer, and repeated every other day—a carrot poultice made with decoction of hen-bane and garden night-shade, to be renewed thrice daily—a warm bath during the day, and a pill morning and evening, composed of one grain of extract of hemlock, and a quarter of a grain of extract of black hellebore. This, with a vegetable diet, and an occasional enema composed the treatment, which was persisted in for six weeks, at the end of which time the wound had assumed a healthy appearance, and had even begun to cicatrize. The vegetable was now changed for an animal diet, with a moderate quantity of wine, the narcotic pills

discontinued, and those of "Belloste" substituted for them, and finally, the leeches were applied less often, and fewer in number. In seven days more the poultice was left off, and the wound dressed, and in a fortnight from this period, the ulcer had entirely healed. The lip, however, still remained thicker than it should be, which annoyed the patient and induced him to be constantly pulling it about and pressing it between his fingers. The consequences were soon obvious—the lip swelled again and became inflamed—the ulcer broke out afresh, and this time proceeded with such rapidity, that in a few days it had acquired its former volume. Three months elapsed before our author saw the patient, and at that time "the ravages of the disease were frightful." It had extended upwards on the left side, and almost destroyed the ala nasi, then descended along the ramus of the lower jaw to the chin, whence it passed upwards on the right to the right side of the nose, which, however, was as yet unhurt. The same plan of treatment which had been so successful in the first instance was resumed, and soon stopped the further progress of the disease, but full two months and a half elapsed before cicatrization had commenced in the ulcer. The *Belloste* pills, which appear to be a mercurial preparation, were then had recourse to, but it was necessary to increase the dose so high as to induce fears of salivation taking place. Under these circumstances, there being much anemia, and the mucous membrane of the mouth blanched and discoloured, M. Lassere determined on the administration of the tincture of iodine, beginning with six drops three times a day, and gradually increasing the dose. A seton at the same time was inserted in the nucha. In six weeks the ulcer was entirely healed, but for the space of three months more the patient wore a bandage on the part, to protect it from the atmospheric influence, and external injury.

This is an interesting case, but we cannot say that we believe it to have been one of cancer. That it was a foul, unhealthy ulcer, which, under improper treatment, or no treatment at all, would have gone on to mischief, and terminated in malignant disease, we think is highly probable, but still we do not think the

characters were by any means those of scirrhus. The case serves well to show the utility of local depletion and soothing treatment, in these unhealthy ulcerations about the gums, which occasionally accompany carious teeth, or follow injury to the alveolar process in their extraction.

90. OPEN FORAMEN OVALE IN THE ADULT.

This case, which is published by Dr. John Crampton, in the recent volume of Dublin Transactions, is preaced by some remarks on the "facilities afforded by the Dublin Hospitals for investigating the nature of diseases after death." He assures us, and indeed we know it to be true, that—"the public, and even the lower orders seem every day to lose those prejudices which were formerly entertained against anatomical examinations." It is curious that the "wild Irish," as John Bull calls his Western neighbours, should get the start of their masters, the English, in emancipation from the shackles of prejudice! When, indeed, we hear a grave and learned judge, descanting on the enormous crime of dissecting a human body, knowing it to have been disinterred (and how is it to be otherwise obtained?) we cannot wonder at the inveteracy of those prejudices which disgrace the highest as well as the lowest orders of society in this country. But we hope for better times.

A young man, aged 18 years, was admitted into the Hardwicke Hospital, on the 6th Feb. 1827, as a fever patient, shewing thoracic inflammation, with cough, difficult breathing, and bloody expectoration. By depletion he was rendered convalescent by the 14th, but, on premature exposure to cold, he was seized with acute rheumatism, which became ultimately translated to the chest, especially to the heart, where great distress was felt. The more acute symptoms were allayed by active depletion; but on the 27th Feb. we find the patient with pain in the region, severe cough with croupy sound—copious muco-purulent expectoration—great difficulty of breathing. He now stated that he had been subject, for some years, to pain in the left side, especially after running, or any

active exertion. The pulse was rapid and irregular—countenance pale—feet œdematous. "The stethoscope indicated acute bronchitis, with hypertrophy, and disordered action of the heart, the motions of that organ being tumultuous and irregular." He lingered till the 10th March, when he expired.

Dissection. "The thoracic cavity was examined on the 12th. On opening it the lungs did not collapse, but the external appearance of this organ was healthy; the parenchymatous tissue exhibited some portions red, congested, and evidently inflamed; the bronchia vascular, and filled with a muco-purulent effusion.

"Pericardium contained about two ounces and a half of fluid, in which a considerable quantity of coagulable lymph was seen; inner surface of this membrane not inflamed, but that portion of it which is reflected over the heart showed marks of inflammation in several places; both ventricles were much enlarged, exhibiting considerable hypertrophy; the semilunar aortic valves showed recent fleshy or *cauliflower* excrescences attached to all of them. Both the ventricles were quite filled with a dense, white coagulum, firmly attached to their parietes. The commencement of the aorta appeared unusually narrow, in proportion to the heart and to the subject; that of the pulmonary artery greatly enlarged. The auricles of the heart were also in a state of considerable dilatation: but the circumstance which attracted attention most, was, that the foramen ovale was open; but the manner of this opening must be more fully described. The septum between the auricles exhibited an oval depression, or attenuated space of about one-third of an inch in diameter, guarded only by a thin membrane; but at one side it was evidently pervious and open, with a rounded and thickened edge. This membrane acted like a curtain or valve; when viewed or pressed from the left auricle it was closed, the curtain or membrane pressing close, and overlapping the opening; viewed from the right auricular cavity, or touched with a probe, it opened, and allowed a free passage, fully as large as a goose's quill, compressed so as to exhibit an elongated or oval section. The

blow-pipe exhibited the same difference of a closed or open space, as it was used from the left or right side of the auricular septum."

Dr. Crampton enters into a long train of reflections on the consequences which must have resulted from this valvular opening between the two auricles of the heart, including the "dark unrenovated blood"—the "tumult and distress felt in the heart and respiratory organs, &c." But we see no evidence of this unrenovated blood, before the last fatal illness—nor even then: and, as to the tumult and distress about the heart, we attribute them to the inflammation resulting from metastasis of acute rheumatism. Dr. Crampton tells us that, in such a case as the above, there is only a part of the venous blood sent through the lungs for renovation, a portion going through the preternatural opening into the left auricle, "from whence it is prevented from returning by pressing back against, and closing the valvular curtain already described." We are much surprised at this reasoning. Does Dr. Crampton remember, that the two auricles act *at the same instant*, and not in succession? If the right auricle, indeed, acted while the left was passive, some blood might go through the valvular opening into the latter—and if the left acted subsequently, while the right was passive, the valve might still prevent the return. But there is no such thing. The two auricles act at the same instant, and both sides of the septum auriculorum are equally pressed, so that, even when there is a wide and patent opening, there is very little intermixture of blood, where the heart otherwise preserves its relative proportions and capacities. It is where the strength of the one auricle predominates over that of the other, or where any obstruction to the natural issue of blood from an auricle takes place, that the foramen ovale produces the admixture in question. Thus, supposing there was a contraction of the opening between the left auricle and ventricle, such obstruction might cause some blood to pass through the foramen ovale, if it remained open. But in a natural and healthy condition of the chambers, we maintain, that such opening would produce little inconvenience, under ordinary states of the circulation. Such appears to have been the case in the

above instance. There was no symptom of blue disease—at least, Dr. Crampton has recorded none. This explanation accounts for the occurrence of open foramen ovale, in people who had evinced no appearance of blue disease during life. In a postscript to this paper, Dr. C. appears to recognize the principle which we have stated—for, after mentioning a patient, aged 34, who died in the hospital, and whose foramen ovale was found open, he says, the valve as in the other case, overlapped and protected the aperture, so that no blood was likely to pass, *unless the contracting power of one side of the heart prevailed over that of the other.* This is the view which we gave of the malformation in question, many years ago. The same reasoning applies to unnatural openings in the septum ventriculorum.

91. HOSPITAL REPORT OF M. CHOMEL, FROM LA CHARITE, BETWEEN THE 1ST OF FEBRUARY AND THE 1ST OF SEPTEMBER, 1827. Reported by M. DE LAGARDE.—REV. MED.

1. PERIPNEUMONY. The total number of cases [of all kinds] treated in the above period are 281, of whom 39 died. The proportion of acute diseases was greater than usual, as compared with the chronic. To show how uncertain is the ratio of mortality in the same disease at different periods, we may remark, that out of 18 cases of peripneumony, occurring in the spring quarter of the above period, six died—while in an equal number of peripneumonies occurring in the Summer, there was not a single death. The treatment adopted by M. Chomel (who is an excellent practitioner) was active depletion, adapted to the violence of the symptoms and strength of the patient. But although this treatment was put in force, even from the earliest dawn of the inflammation, the latter could not always be checked; but pursued its course to a fatal termination. Large doses of antimony were tried in some cases, with success—in others, without good effects.

2. INTERMITTENTS. Twenty-four patients labouring under intermittent fever were admitted during the half-year. The

types were various, and some were complicated with slight inflammations, not requiring an active treatment. A few days were always allowed to pass before the febrifuge was administered. In eleven cases, the cure was spontaneous, without any medicine, and merely from change of scene, and proper diet. When the ague resisted this process, the quinine was given in doses of not less than six grains in the 24 hours, with complete success.

3. ANEURISM. One case of aneurism of the arch of the aorta, with pulsating tumour below the left clavicle presented itself. The patient was a washerwoman, aged 38 years. The plan of Valsalva was tried, but without success, and the patient left the hospital, tired out with the starvation and depletion which she underwent there, without any apparent benefit.

4. GASTRIC COMPLAINTS. Several patients labouring under derangements of the stomach [*embarras gastrique*] were treated during the semestre. Many were cured by low diet, repose, and acidulated drink. In some cases it was necessary to prescribe emetics. In a certain proportion of cases, these were extremely serviceable, and removed the symptoms very quickly—in others, the emetics were injurious—"a fact which proves that stomach affections are not all of the same nature and to be cured by a routine treatment."

5. ACUTE RHEUMATISM. Most of these cases were managed by gentle antiphlogistics and low diet, requiring from two to four weeks for cure. In one case, which was very severe, and where almost all the joints were swelled and inflamed, the large doses of tartar-emetic were employed (six grains a day) without much, indeed with scarcely any good effect. The tolerance (a term applied to the period when the antimony ceases to cause sickness) was established on the second day; but little or no progress was made, the rheumatic inflammation rather shifting its seat than quitting its hold. After a month's sojourn in the hospital, the patient went away, by no means cured. It does not appear that our Gallic neighbours venture much on bark, arsenic,

mercury, or other heroic remedy in this distressing disease.

6. AMENORRHOEA. The general practice in France is to apply fifteen or twenty leeches to the pudendum. M. Chomel prefers applying three or four daily, for five or six days, at the expected menstrual periods, in order to imitate more nearly the process of nature. Previously to the expected epoch, he orders cupping-glasses (dry) to the upper and inner part of the thighs, and warm vapour baths to the lower part of the body.

We shall now proceed to analyse some of the cases detailed in this report.

7. PNEUMONIA CARDITIS. A plumber, aged 40 years, previously strong and healthy, with the exception of some catarrhal affections, felt a shiver, on the evening of the 6th February, 1827, followed by pain in his right side. He went to work the next day, but on the 3d he was obliged to take to his bed. On the 10th Feb. he entered the hospital. Below the right nipple there was acute pain, increased by deep inspiration, with inability to lie on that side. The cough was frequent, the expectoration free and mucous, the sound, on percussion, rather dull, even on the left side. In the right side of the chest the "râle sonore" and the "râle crepitant" were heard in several points. In the posterior portions of lung, in this side, the respiration was pretty natural. In the left side the respiration was everywhere heard. He had been bled the preceding evening, and the blood was highly inflamed. Fifteen leeches to the side affected. Ptsians. 11th. Little alteration. Venesection to 3*ixj*. was ordered, but not carried into effect. 12th. The symptoms are exacerbated, and the sonorous wheeze is heard in the left side of the chest. Bled to twelve ounces. 13th. No diminution of the symptoms—blood not much inflamed. To take six grains of tartar-emetic in the next twenty fours in an emulsion. 14th. The patient is more quiet—no alteration in the state of the chest, as indicated by auscultation—four stools from the antimony, but no sickness. Tongue natural—no tenderness at the epigastrium. The antimony to be repeated. 15th. The countenance more sunken. Has had two stools. The antimony to be increased to

twelve grains. 16th. Very obscure in the region of the heart, on percussion—respiration very quick—cough and expectoration the same—no stools, no vomiting—pulse 108, and irregular—great debility. Tartar-emetic to be increased to 24 grains. 17th. Had abundant perspiration last night—scarcely any respiration to be heard in the front of the left side. Antimony increased to 36 grains.

We need not pursue the case any farther. The patient died on the 20th of the same month

Dissection. There was no diseased appearance in the head. The left lung was everywhere adherent, and the superior three-fourths of that lung were hepatized—the inferior portions not quite so, but approaching to that state. The right lung presented the different degrees of hepatization. There was some ulceration in the mucous membrane of the larynx, about the glottis. There was pericarditis, and considerable effusion into the cavity of the pericardium, of almost a purulent fluid. The whole of the heart was covered with false membranes from a line to two lines in thickness. There were several small ulcerations, and other marks of inflammation in the mucous membrane of the œsophagus, stomach, and intestines.

Reflections. M. Chomel evidently anticipates the remark that depletion was too sparingly employed at the commencement of this disease. He excuses himself by observing that the two general bleedings produced no mitigation of the symptoms. But what are two bleedings of twelve ounces each? Double the quantity would have been a great deal too little. Besides, the day that was allowed to elapse between the first and second bleeding, was a fatal neglect. *Bis dat qui dat cito.* But M. Chomel, or his reporter, tells us that, in the same ward, a few days previously, a man had been attacked with pneumonia, and was very vigorously depleted from the beginning, yet still the inflammation went on to a fatal issue. Hence he concludes that there was something specific or malignant in the peripneumonies of the Spring of 1827. There might be so; but we question whether either of these cases presented any just grounds for not carrying depletion to a much greater extent, without attending to any thing but the

disorganizing inflammation that was evidently advancing daily on a vital organ.

Whether the large quantities of tartarized antimony which were swallowed during the illness, without producing either vomiting or purging, had any thing to do with the ulceration and inflammation observed in the primæ viæ, we will not pretend to say, since much greater devastations are seen where no medicine of this kind has been administered. But, considering the effects which this substance produces on the external surface, we should not wonder if a corresponding degree of irritation might not be produced by such large exhibitions internally. We shall make room for one more case.

8 MOLLESCENCE OF THE COATS OF THE STOMACH. A married woman, aged 22 years, who had had one child, became troubled with a considerable menorrhagia in the beginning of the year 1827, at which period she was also exposed to several moral emotions of a distressing nature. Nevertheless she became pregnant, and experienced almost constant malaise—anorexia—thirst—tenderness at the epigastrium after eating—and, finally, vomiting of yellow and bitter matters. It was three days after the commencement of these more serious symptoms that she entered LA CHARITÉ, viz.: on the 24th May, 1827. The expression of the countenance was natural, as was the state of the skin and tongue—the pulse was scarcely quickened—thirst very moderate—epigastrium very tender on pressure, but the abdomen soft and indolent. Each day she had ten or twelve vomitings of bilious matters, with some streaks of blood—stools regular. Leeches were applied to the epigastrium, and fomentations, lavements, diluents, &c. were employed, but without success. The vomitings continued—the tenderness of the epigastrium increased—the tongue was sometimes red, or shining—sometimes natural. Opium, for a time, diminished the sickness, but ultimately failed. On the 24th June, the sickness suddenly ceased—and the epigastric pain vanished entirely. But debility and emaciation advanced, and she expired on the 9th July, no vomiting having occurred for a fortnight before dissolution.

Dissection. On opening the abdomen,

the stomach was found torn from the cardiac orifice to about the middle of its anterior surface; but without any extravasation into the abdomen. A great portion of the mucous membrane of this organ was completely destroyed, and some parts of the muscular and peritoneal coverings were so soft and thin as to be ruptured almost by handling them. There were only a few red patches in the mucous membrane of the intestines. The uterus contained a fœtus of three months.

REMARKS. This was an extremely well-marked case of gastritis, (of the mucous membrane,) as far as pathology was concerned. But it is not a little remarkable that, while such a dreadful disorganization was going forward in a vital viscus, there should be so little febrile disturbance in the system. The pulse and skin scarcely evinced any deviation from a state of health, and the tongue was often natural. The cessation of the vomiting too, for a fortnight before death, was an occurrence not to be expected, according to the ideas which are formed from elementary instruction, and systematic descriptions of diseases. It is from clinical experience, and from faithful clinical reports, that the mind becomes stored with the knowledge of those almost infinite varieties presented in diseases, the want of which knowledge renders the practitioner liable to perpetual error in prognosis and diagnosis. The apparently dry details of a case of this kind are quite wearisome, if not disgusting to the young, and especially to the routine practitioner. But we can tell them, that a careful perusal of such cases is one of the best modes of disciplining the mind for receiving accurate impressions at the bed-side of sickness. There is a very prevalent idea among professional men, that *practice alone* makes the good and successful practitioner. We deny it—and this denial is grounded on more than 30 years of careful observation, not only of diseases, but of men. In all that course of time, we never knew a good and a successful practitioner who did not read and study, as well as observe. It is usual for the lazy man of experience to quote John Hunter, as an example of great eminence, without reading. Not having known John Hunter, we cannot speak as to his *practical* talents; but the foregoing opinion is the

result of what we have seen among our own acquaintances, which are not very few. It is fashionable to deride books and study; but, for our own parts, we have no hesitation in affirming, that nine-tenths of our *practical* knowledge would never have been acquired, had it not been for that discipline which results from studying the practical observations of others. This sentiment from grey hairs may probably have some weight with those who think that every thing is to be gained by the *sight* of diseases, and little or nothing from *reflection* excited by reading. Not a day passes—not a day has passed for twenty years, that we have not seen the most outrageous errors committed by men who pride themselves on never consulting any thing but their own *experience*. Such men were born in darkness—live in darkness—and will die in darkness.

92. TUMOURS WITHIN THE ORBIT.

We resume the review of the cases detailed by Dr. Ballingall, in his Clinical Report, and we must say that we highly approve of the very candid manner in which that Report has been drawn up. The cases bear the impress of fairness and authenticity; are told in a plain, unvarnished style; and are not of that *select* description preferred by *some*, whose object in giving only instances of success, is most pure and disinterested of course. Dr. Ballingall remarks that, in making out his sketch, he has borne in mind the sentiment, that "he who neglects to record what he imperfectly knows, in the hope that he will one day know it better, and who waits for the fulness of information, will find, too late, that he has forfeited advantages for which no accuracy of knowledge can compensate; and that he is attempting to describe with blunted feelings, that which owes its all to the very imperfection of his knowledge." The remark is but too true, and, if we chose, we could point out some memorable, though perhaps invidious, illustrations in the medical literature of the present day. But we must get us to our task.

It appears that during the season there

have been several remarkable examples of tumours within the orbit of the eye.

Case 1. In the month of January, 1827, J. McIntosh was exposed to cold, and, after a certain time, (which is not clearly stated,) noticed a tumour in the right orbit. In July he was admitted into the Royal Infirmary, but would not submit to an operation, and was dismissed. In November he returned, the disease presenting the following appearances: Between the roof of the orbit and the globe of the right eye, there is a soft moveable tumour, depressing the ball of the eye towards the cheek, and pushing outwards the upper eye lid, which is considerably inflamed, as well as the conjunctiva covering the surface of the tumour. The structure of the eye is apparently sound, and the vision unimpaired, save that the depression of the organ obliges the patient to throw back his head, and elevate his face, in attempting to see objects placed before him. An operation was determined on, and executed by dividing the superior palpebra upwards and outwards from the external canthus of the eye, and having dissected it off from the surface of the swelling, separating the tumour (which was done with much difficulty) from the contiguous parts. A pedicle, by which it sprung from the very bottom of the orbit, was cut across by the probe-pointed scissors, and small portions of it afterwards removed.

For nearly a week the man did well, but at the end of that time a violent erysipelatous inflammation attacked the face and forehead, extending thence over the whole head, and accompanied with delirium, and a very high pulse. These symptoms were somewhat relieved by general and local bleeding, saline purges with antimony, blister to the nucha, and anodyne fomentations; but, on the 22d, he was in the greatest state of prostration, with cold extremities, and muttering delirium. Under the use of stimulants, and another blister to the neck, he again rallied, the cornea ulcerated, and the crystalline lens was discharged through the aperture. The delirium continued with intermissions, he had a ravenous appetite, and on the 28th he expired, his symptoms all along having the typhoid character. No complete dissection was permitted, but a portion of the principal

tumour was found still attached to the sheath of the optic nerve, and several small melanotic tubercles imbedded in the fatty matter surrounding the muscles of the eye. Some serous effusion both on the surface and in the ventricles of the brain.

"In the treatment of this case I have no hesitation in saying, that if I had been fully aware of the nature of the disease, and of the deep attachment of the tumor, I should have proceeded at once to extirpate the whole contents of the orbit; but having succeeded in removing the bulk of the tumor with safety to the eyeball, I felt reluctant to change my plan of operation. The inflammation immediately succeeding to the removal of the tumor was, as I have already noticed, much less than was to have been expected from so severe an operation, but when the symptoms of erysipelas supervened, it was obvious that the case became one of a very perplexing and hazardous description.

"The patient's system being surcharged with mercury, we were debarred from the use of mercurial purgatives, which are often so beneficial in erysipelatous inflammation; and this man had been remarked, even when in the hospital in July last, to have something of that sallow cachectic look often attendant upon internal organic disease, and which rendered him, in my estimation, an unfit subject for profuse or extensive evacuations of blood."

Case 2. This was under the care of Dr. Hunter, and was very similar to the above. The patient was a lad, aged 17, admitted into the Infirmary on the 28th of January, the left eye being pushed close to the roof of the orbit, and protruding from it, the lids separated, and the conjunctiva of the lower everted by a tumour, apparently occupying the whole of the floor of the orbit, of a soft fleshy consistence, but not moveable. There was no head-ach, no pain in the eye, which could be moved in all directions, but a sense of tension in it, and a frequent watering. The sight was a little impaired, but he could read large print. Eight months previously he had received a blow upon the eye, which gave him considerable pain, and in the course of three

weeks he noticed swelling in the orbit, which gradually increased. Leeches, blisters, lotions, were employed, and a puncture was twice made under the eyelid, giving issue to about half an ounce of blood.

The tumour was removed by Dr. Hunter, without injury to the ball of the eye, and was found to present the same general melanoid characters as the former, though it was softer, and in some parts quite liquid, like tar. At the end of a week after the operation the cornea ulcerated, in spite of argent. nit. and vinum opii, and protrusion of the iris took place; erysipelas of the parts around the eye also occurred, but gave way before repeated bleedings ad deliquium, salines with antimony and fomentations.

Dr. Ballingall does not consider these melanoid tumours as malignant, at least when compared with fungus hæmatodes and cancer. The two latter begin in a definite point, and extend their ravages in all directions, invading, as it were, with a poisonous leaven, the tissues in their vicinity, whilst the melanotic matter, on the contrary, is constantly found in a regular cyst. The following appears to be a case of fungus hæmatodes of the eye.

Case 3. On the 29th of January, Robert Ames was admitted with a soft elastic tumour, slightly moveable, and about the size of an orange, projecting from the right orbit. Superiorly the finger could be readily insinuated between it and the skin of the eyebrow, but in every other direction it encroached much on the skin of the surrounding parts. The skin of the palpebræ and conjunctiva, which covered the greater part of the tumour, was of a dark colour, and the veins very tortuous, whilst in the centre of the tumour, there was a slightly elevated, sloughy, bleeding fungus, through which the probe passed backwards for two inches and a half, and from which issued dark-coloured fetid discharge. On either temple, and beneath the skin of both lips, were smaller tumours, of similar character, but firmer consistence. Ten years prior to admission the eye was injured by a blow; two years afterwards the sight was gone; and in six years more lancinating pain began,

and was succeeded by the swelling, which went on progressively increasing.

The whole of the diseased mass was removed by Dr. B. and the bony margin of the orbit near the external canthus being affected with the disease, was scraped off with a strong scalpel, and the cavity filled with lint. A slight attack of erysipelas followed, but was readily checked; the cavity suppurred, and healthy but pale-coloured granulations sprung up. On examining the eye the texture of the tumour was found to be so fairly broken down, that it was difficult to say exactly what it was, though the appearances were most like those of fungus hæmatodes. The tumour began in the globe itself, and presented the soft elastic feel of the above disease; but one argument against it was, "the existence of other tumours in the neighbourhood, evidently of a melanotic appearance."

If the disease was really fungus hæmatodes, the chances of ultimate cure must be slight indeed. The cases related by Mr. Abernethy, Mr. Burns, and Mr. Hey, particularly the latter, terminated most unfortunately, even, in many instances, when the disease was seated in the extremities, and that most complete of all extirpations, amputation of the member was performed. Dr. Ballingall, however, thinks that he has witnessed two instances of cure, one where the disease was seated in the mamma, the other in the arm. We almost fear, from what we have ourselves seen, that Dr. B. has been deceived.

93. CLINICAL REPORT OF LA PITIE.*

Ligature of Arteries.

In the commencement of this report there are some general rules laid down for the finding and securing of arteries, but as they are most of them tolerably well known, if not generally acted upon, by surgeons in this country, they scarcely require any notice here. We may mention, however, that M. Lisfranc agrees with the majority of his countrymen in still preferring broad ligatures made of

* M. Avenel. *Révue Médicale*, Mars, 1821.

vegetable matter, "placed upon a cylinder of diachylon," because they cut through the middle and inner coats of the artery quite as readily as the fine ligature, and have not the disadvantage of destroying the outer coat too soon. M. Lisfranc adapts the breadth of his thread to the calibre of the artery. In this country, surgeons decidedly prefer the fine ligature, because it makes a cleaner incised wound of the inner coats, and certainly has not been found, in practice, to destroy the outer a whit too quickly. Whether it is that a *lectille* prejudice, as Mr. Cobbett would call it, still lurks in the minds of our Gallic brethren, or that the arteries of John Bull partake somewhat of the toughness of his native beef, and will stand more tugging and hauling than the *soupe-maigre* tubes of Monsieur, we leave to keener casuists to determine. But to the cases.

CASE 1. *Fungus Hamatodes—Ligature of the Carotid—Death.*

Josephine Lenoir, æt 18, of a lymphatico-sanguineous temperament, having previously enjoyed good health, perceived, when twelve years of age, in the right parotid region, a tumour accompanied with cephalalgia, pulsation on that side of the head, and palpitations of the heart. The tumour was thought by the medical men who saw her to be enlargement of the lymphatic glands, but after a-while hæmorrhage began to take place from time to time from the external ear, and the pulsations became more distinct. On the 11th January 1827, she entered La Pitié, in the following condition. Behind the angle of the lower jaw, stretching beneath the lobule of the ear, was a soft regularly round tumour, about the size of an egg; there was no discolouration, it diminished under pressure, and pulsated strongly and frequently, the pulsations being in time with those of the heart, and diminishing but not ceasing entirely on compression of the common carotid. The disease was thought to be aneurism of the external carotid, and the girl was bled and kept on low diet from January until April. During this interval the heart was examined by several physicians, all of whom pronounced it to be sound, but the carotid pulsated so strongly and extensively, that it was feared the vessel was diseased. A very free hæmor-

rhage taking place from the ear, a careful examination of the tube was made, and a little soft reddish tubercle found in its interior, which gave rise to the suspicion, that the disease was not aneurism after all, but fungus hæmatodes. M. Lisfranc, distrusting his own judgment, presented the patient to the Royal Academy of Medicine, most of the members of which gave their opinion in favour of aneurism, and all in favour of an operation.

Backed by such authority, M. L. determined on tying the common carotid, if it was sound, and if not, the innominate, as had been previously done by Valentine Mott of New-York, and Græfe of Berlin. Accordingly, on the 10th April, the operation was performed in the presence of several members of the Academy. The steps we need not describe, but the vessel (carotid) seems to have been discovered and tied with facility and despatch, and the patient bore the whole remarkably well. The tumour, on tying the ligature, diminished to nearly one half, but its pulsation did not entirely cease.

At one, p. m. the pulse got up, with flushed face, and cephalalgia. *V. S. ad 3xvj.—ice to the tumour.* Towards evening the patient began to complain of sore throat, and the ice was discontinued. There was at this time syncope, cephalalgia, pain in the sternum and epigastric region, full pulse, &c. but as night advanced these symptoms wore off, and the girl got some sleep. 11th. Much the same as yesterday afternoon, but a hæmorrhage from the nose occurred this morning, which relieved the head-ache. At present, there is much throbbing in the head and dyspnoea. *Bleeding from the foot to 3xvj.* The patient was relieved by this bleeding, but it was necessary to repeat it in the evening, and again, to the same amount, on the 12th and 13th. 14th. Heat of skin, pulse full, face injected, oppression at the chest, feeling of great debility. *Bleeding from the foot to 3viij. with slight syncope and relief.* She went on with little alteration until the 17th, when there was such violent cephalalgia and pain in the chest, that it was necessary again to draw blood. In the evening, on dressing the wound, a remarkable pulsation was observed about the ligature. On the morning of the 18th,

the patient, after awaking from sleep, complained of thirst, but, in the action of raising her head to drink, a frightful hæmorrhage burst from the wound. The *religieuse* endeavoured to stop it, but in vain, and when the house-surgeon arrived, syncope had taken place. The bleeding ceased, but in little better than an hour the poor girl expired.

Dissection 45 hours after death. The petrous portion of the temporal bone of the right side was triple its natural volume, so as to be on a level with the lesser wings of the os sphenoides. The structure of the bone was soft and friable, its interior spongy and reddish, with open cavities, apparently dilated veins. The extremity of the petrous portion was united with the posterior clinoid processes, and the whole so disorganized, that probes could be passed in all directions, from the interior of the cranium to the neck. The seventh pair of nerves, on entering the internal meatus auditorius, were double their natural size, but after entering the bone such was the confusion of the diseased parts, that the most careful dissection could trace them no further. The dura mater in the right temporal fossa was thickened and inseparably united to the bone. The petrous and cavernous sinuses of the right side were enormously dilated and filled with an erectile, spongy, cellular substance, but no blood. The arachnoid and pia mater, opposite the middle lobe of the cerebrum, were thickened and adherent to one another. The tumour in the neck occupied the space between the angle of the lower jaw and the mastoid process, and had taken very strong attachments to the inferior surface of the temporal bone and the meatus auditorius. The relations of the tumour to the neighbouring parts were very extensive, and are given with the most praiseworthy minuteness and anatomical precision. However, we shall pass them over, and merely state that the parotid gland was found on its anterior part very much wasted, but unaltered in structure; that the tumour was supplied by the posterior auris artery, which was much enlarged, and by three great branches from the internal carotid which passed through its substance—that a prolongation of the tumour extended *within* the internal jugular vein; and that a great number of new vessels had sprung up, as it were, around

it and about it. The structure of the tumour was soft, spongy, of a dirty reddish brown, one part being formed of aneurismatic vessels, the other of an erectile tissue. Within it were bands of fibres forming cells, apparently “only a dilatation of the arteries and veins, losing themselves within it, and constituting the elements of the fungus.”

The wound made by the operation was half cicatrized, the other half presented healthy granulations. No abscess, no collection of matter existed in it, and the ligature lay in it perfectly secure. The rupture, in fact, had taken place an inch and a quarter *below* this point, and the intervening space of the artery was perfectly entire, and occupied by a firm coagulum!

This case is certainly remarkable, both on account of the curious nature of the disease, and the still more curious sequel of the operation. It is styled in the report an instance of fungus hæmatodes, but if we understand the description aright, it looks as much like “aneurism by anastomosis” as fungus hæmatodes. The mode in which the secondary hæmorrhage occurred is the most puzzling of the whole; for we are told, that if we can only get a sufficient plug of coagulum to seal the extremity of the vessel on the separation of the ligature, we are safe, and the danger of hæmorrhage is over. Here there was coagulum enough, and yet the artery gave way, and in a most extraordinary situation too, viz. not where it was bruised and injured by the ligature, but an inch and a quarter lower down! Verily, this is one of those cases which make our fine physiological principles look foolish!

CASE 2. Wound of the Femoral Artery—Spurious Aneurism—Vessel successfully Tied.

It is now pretty firmly established, that the principle of John Hunter's operation for aneurism is inapplicable to wounds of arteries, and that a single ligature at a distance from the wound, between it and the heart, is bad and dangerous practice. The general rule, and a very excellent rule too, in cases of wounded arteries is—to cut down and tie the vessel above and below the puncture. It has been thought, however, by some surgeons, amongst others Mr. Guthrie, that the ligature of a large artery like the femoral,

in cases where no aneurism has previously existed, and the collateral vessels in consequences are not dilated beyond their natural dimensions, is in many instances attended with danger of gangrene, from the sudden check to the circulation in the limb. That there are many cases on record which might be adduced in favour of the opinion, we are ready to allow, but, at the same time, we question if the preponderance of facts be not upon the other side. The present case, for one, militates against the doctrine.

M. T. æt. 23, of sanguineous temperament, and violent temper, in a fit of passion, on the 3d of June, 1827, stabbed himself with a kitchen knife, in the lower part of the upper third of the thigh, the blade passing through the limb in the direction of the femoral artery, just above where it is enclosed within the sheath of the triceps. A frightful hæmorrhage took place, and M. T. fell in a second or two bathed in blood. M. M. Devilliers, Salome, and Martinet, arrived in a few minutes, and made a firm compression on the artery in the groin, but this was rendered difficult by constant vomiting on the part of the patient. It was four or five hours before M. Lisfranc could arrive, at which time there was vomiting, subsultus tendinum, attacks of syncope, deadly paleness, the limb double its natural volume, but the integuments undischoloured. M. L. without delay cut down upon the vessel at the part where it was wounded, and discovered it, apparently, with little difficulty. There was no effusion of blood in the sub-cutaneous cellular tissue, nor beneath the fascia lata, but about the sartorius muscle, where it had been cut, extravasation had taken place, with adhesions of the muscle to the neighbouring parts. Beneath the sartorius and the fascia proceeding from it, were found some very dense clots, as large as a hen's egg. They were cleared away and the arterial sheath freely opened, when the artery was found lying quite empty behind the vein which became exceedingly distended during the efforts of the patient. Much difficulty was experienced in discovering the situation of the wound in the vessel, and it was necessary at last to withdraw the compression and allow a gush of blood to guide the surgeon to the spot. This having been indicated, M. Lisfranc first tied the vessel

above, taking care that no nervous filament was included in the ligature, and then below, in order to do which he was obliged to divide the sheath of the triceps for about a quarter of an inch. The edges of the wound were brought together by adhesive straps, compresses, and bandages, but there came on so much pain and swelling in the limb that it was necessary to slacken the latter, and indeed remove it entirely from the leg. Next day there was heat of skin, slight delirium, full pulse, &c. but on the 5th, this had quite subsided. The limb always preserved its natural temperature, and on the 10th, pulsation was felt in the popliteal artery. On the 12th, the anterior tibial was felt throbbing, and, on the 14th, the same was observed with the posterior tibial and plantar. On this day the lower ligature came away, and on the 16th, the upper followed. On the 30th, the patient was able to resume his usual occupations, some swelling still remaining about the wound, which, however, was soon dispersed by the application of a few leeches.

Of course it must be an object with all surgeons to avoid including nerves in the ligature with the artery, and it appears that M. Lisfranc is in the habit of guarding against this mistake, by slightly rotating the vessel on its axis with the point of his finger, so as to ascertain that it is completely free, before he ties the thread. M. Lisfranc objects to the term, "false primitive aneurism," as applied to these cases, because it often happens that the greatest effusion of blood into the neighbouring parts is not immediately upon the reception of the wound, but at a later period. M. L. has seen simple gun-shot wounds, uncomplicated with broken bone, followed by false aneurism *fifteen or twenty* days after the injury, but surely the rupture of the vessel in this case must be from *ulceration*. We think, ourselves, that the designation of "diffused aneurism," which is generally applied in this country is the best, as it involves no theory, but merely states an obvious fact.

CASE 3. *Sarcoma of the Lower Jaw—Amputation of half the Bone—Cure.*

Monsieur Lisfranc is a bold surgeon and cool operator, as this case will shew. By the bye, we fear that the remarks which

have been lately made on the above gentlemen, M Roux, and the officers of the French hospitals generally, in the Medical Gazette, will do no good. English practitioners and English students have always been received with politeness and liberality at the Parisian hospitals, and the publication of strictures, many of which are any thing but good natured, upon the practice of the professors, is making but a sorry recompense for favours received. It is like betraying your host after eating his bread and salt;

"the salt, that sacred pledge
Which, once partaken, blunts the sabre's edge,
Makes even contending tribes in peace unite,
And hated hosts seem brethren to the sight!"

P. F. Vaneisam, æt. 47, of sanguineous temperament, and good constitution, entered the Hospice de Perfectionnement, Nov. 9th. 1827, with a sarcomatous tumour, about the size of two large eggs, extending from the left ramus of the inferior maxillary bone, to the symphysis. The gums were affected with a cancerous ulcer, the discharge from which was sanious and extremely fetid; the lymphatic glands beneath the jaw on the affected side, were considerably enlarged, the integuments entire. Seven months previous to his admission, the patient first noticed a small tumour connected with the bone, about the size of a common pea; this gradually increased, attended with continued lancinating pains, and obstructing both articulation and mastication. M. Lisfranc, prior to the performance of any operation, made a trial of antiphlogistic measures, which dispersed the enlargement of the lymphatic glands, but had no effect whatever either on the size of the tumour or the lancinating pains experienced in it. Accordingly, on the 26th of November, the disease was removed by the knife in the following manner.

An incision was begun in the centre of the lower lip, and carried perpendicularly downwards to the lower margin of inferior maxillary bone, quite through the soft parts covering it. In consequence of the volume of the tumour, it was found necessary to prolong this incision an inch lower down, from which point the knife was continued transversely, as far as within a quarter of an inch below and before the angle of the jaw. The fingers of an assistant had been previously placed

on the "origiu" of the carotids to mark their situation, and from the lower border of the chin to the angle of the jaw, the incision was merely carried through the skin and cellular membrane. The dissection of the soft parts from the surface of the tumour was extremely painful, but the flap having been formed, two teeth were extracted, the bone was divided across the ramus by a fine saw with extraordinary facility, and then the symphysis by a common saw; the operator seized the upper part of the tumour with his three middle fingers, the lower with his thumb, and then by means of slight force, was able to draw down the jaw, and separate it from a great quantity of the tissues attached to it behind. The tumour was found to extend deeply beneath the tongue, and required a very cautious dissection to remove it. The ranine arteries were not wounded, indeed no vessel of any consequence, so that *not a single ligature nor cautery was applied!*

Three hours after the patient had been placed in bed, M. Lisfranc drew together the lips of the perpendicular incision by the interrupted suture, but did not attempt to unite the transverse portion of the wound, in order that liquids might flow readily. On the 31st, the perpendicular portion had united, and the lower was freely suppurating. On the 15th December, the patient could speak with facility, and was allowed solid food. Saliva continued to flow through the lower wound, and compression was made upon its edges, but it caused too much pain and was discontinued. M. Lisfranc then placed in the mouth a small sponge to absorb the liquids, and in the course of a few days the wound had entirely cicatrized. The patient was kept in the hospital a month after this, and then departed for the country, the distortion of the jaw being very slight, indeed the deformity scarcely apparent on wearing a cravat. The patient could articulate distinctly.

In the remarks upon the case, M. Lisfranc details the appearances observed in patients who have died some time after amputation of greater or lesser quantities of the lower jaw. If the portion removed be small, and taken from the median line, the portions are little removed from each other and unite like a common fracture. 2do. When the ends

of bone remain at a certain distance, asunder, a very solid fibrous substance like that which unites a badly set patella, is found to intervene between them and prove a considerable check upon their motion. 3tio. In cases when the union between the ends of bone is firm, nothing particular happens to the temporo-maxillary articulation, but when, from the action of the muscles, the inferior extremity of the bone is carried inwards, luxation, partial or complete, of the condyle of the jaw from the articulating cavity is the consequence.

This concludes M. Lisfranc's Clinical Report, and a very good one we must confess it is. We think it is impossible to peruse it without being struck with the boldness and dexterity of the operator, and again we take an opportunity of depreciating the mode of commenting on this and other French surgeons, adopted by the *PARISIAN REPORTER* in the *Medical Gazette*. Its effect, if it has any, must be to engender ill blood, and perhaps deprive English students of advantages in Parisian hospitals which they are at present in possession of. As we before observed, we are sure that it is not the wish of our contemporary to do any thing that is not liberal and gentlemanly, but, at the same time, we must say that the spirit of his *REPORTER* smacks rather too much of the leaven of a certain Journal that need not be named.

94. SECONDARY HÆMORRHAGE.

Case 1. A man of rather spare habit, was admitted, April 10th, into St. Thomas's Hospital, under the care of Mr. Travers, with compound fracture of the olecranon, and dislocation forwards of the radius and ulna in consequence of a blow from the handle of a crane. So much violence had been already received, that it was not judged prudent to inflict any more *secundum artem*, by attempts at reduction; the limb was accordingly laid out in Mr. Amesbury's apparatus, and leeches applied, in spite of which, inflammation and suppuration in the joint very rapidly took place. Under these circumstances, amputation of the arm was performed on the 26th, four arteries requiring ligatures. On the 27th, pain

and heat of the stump came on, and on the 28th, the bandage being found, on account of the swelling, to have become very tight, was removed. Next day, the other dressings were removed also, when the stump looked foul and sloughy, and the discharge was copious and unhealthy. *Poultices—nutritious diet.*

Within eleven days after the operation, all the ligatures except that on the brachial artery had come away, but on the 6th of May, there was suddenly a gush of arterial blood from the stump. Pressure was applied, and when Mr. T. arrived, the hæmorrhage had ceased, but the patient was much enfeebled, and the pulse decidedly hæmorrhagic. Mr. Travers, with great difficulty, in consequence of the ragged, sloughy condition of the stump, removed the ligature from the brachial artery and re-secured it, but next morning the bleeding re-appeared. Mr. South was called, and finding it to proceed from the profunda artery (which?) attempted to tie the vessel, but from its being implicated in the surrounding mass of disease, was obliged to include some of the muscle, &c. in the ligature. After a few minutes the same vessel again burst out bleeding, and was again secured, but rather higher up. It was of no avail, for the patient sank next day.

On opening the chest, serous effusion, with flocculi of lymph was found in the left cavity of the pleuræ, both of which were thickened, opaque, and coated with a layer of coagulable lymph. No examination of the vessels of the stump was made. *Med. Gaz.*

We cannot say that we much admire the practice pursued in this case, or the dissection of it afterwards. As far as we can perceive, and really we make no pretensions to seeing farther than our neighbours, the hæmorrhage was owing to the sloughing which came upon the stump, and extremities of the vessels which lay in it. If such was the case, what hope could there be in pulling one ligature off a diseased vessel, only to put another ligature on? Would it not have been preferable to have tied the brachial artery *above*, instead of diving with needle after needle, and irritating parts already irritable enough? We mean, of course, no reflections on the surgeons, for whose professional attainments we have the highest possible respect, but, as we are told that Homer *sometimes*

nodes, even so, we suppose, may Mr. Travers. In the Number of the Gazette succeeding that in which the above appears, Mr. South suggests transfusion, and the reporter asks, what would have been the effect of it? We think we could very safely answer—no good, if it had any effect at all! Mr. South also hints at the actual cautery, and relates a case which happened to Mr. Cline, jun. where, after amputation of the thigh, the stump became unhealthy, hæmorrhage took place, and was arrested by the actual cautery. We cannot say that we entirely agree with the proposal, indeed if we might be allowed a bad joke, we should say that Mr. South, has got out of his latitude.

CASE 2. Removal of Carcinomatous Glands from the Groin—Secondary Hæmorrhage—Ligature of the External Iliac.

James Thompson, æt. 39, a chimney-sweeper, was admitted into the Royal Infirmary, Sept. 10th, and soon afterwards some carcinomatous glands situated close upon the great femoral vessels, were removed by Dr. Cullen. The wound went on granulating kindly for the first fortnight, and was much reduced in extent, when suddenly it assumed a sloughy or phagedænic appearance, and became excavated to a considerable depth. In this state, it continued stationary for several weeks, and then again took on the ulcerative process, with severe lancinating pains, œdema of the limb, and much constitutional disturbance. Laxatives and opiates with poultices, and the arsenical solution locally, were the means employed, but about the middle of December, some slight discharges of arterial blood were observed to issue from the wound.

On the morning of the 18th, there was an alarming bleeding, which recurred again in the course of the forenoon, but was readily suppressed by the application of dry lint with pressure. In the afternoon, there was hæmorrhage to the extent of several ounces; pressure by the hands of an assistant was directed to be kept up, and, at half-past seven, P. M. it was determined in consultation to tie the external iliac. This was done by making an incision, straight in consequence of

the encroachment of the ulcer on the lower margin of the external oblique, from near the abdominal ring to the anterior superior spine of the ilium. After dividing some thickened and indurated cellular membrane, the tendon of the external oblique was exposed, and divided with the internal oblique and transversalis, "when the artery was readily found pulsating at the bottom of the wound, with some enlarged lymphatic glands lying over and contiguous to it." In separating the glands, a large vessel was ruptured and bled smartly, but the iliac trunk having been seized, above the bleeding point, between the fore-finger and thumb of the left hand, the aneurism-needle was passed under it with the right, the knot tied, one end of the ligature cut off, and the wound dressed with adhesive strap. As nothing whatever is said of the peritoneum in describing the steps of the operation, we suppose it must have got out of the way, which was certainly very obliging on the part of that membrane. The ruptured vessel must have been either the epigastric or circumflexa ilii.

Next morning there were symptoms of slight peritoneal inflammation, which was treated by leeches to the abdomen, mild laxatives and fomentations. The pulse, for the ten days subsequent to the operation, ranged from 90 to 110, and on the eleventh day the ligature separated, at which time great part of the wound had united, the œdema of the affected limb was considerably diminished, but there was still a great degree of numbness, and no pulsation in any part of it. On the 30th January the wound had nearly cicatrized, and the patient was getting up, when hæmorrhage took place, and recurred in the afternoon, but was checked by a piece of sponge. On the morning of the 31st, two slight bleedings, hæmorrhage to the extent of two pounds, "apparently from a branch of the obturator, the ulceration having latterly extended down towards the thyroid foramen." The man had nausea, fluttering pulse, &c. and the flow of blood was stopped by sponge and pressure, which were continued until the 10th February, it being determined in consultation that no further operation should be attempted. The bleeding has not returned, but the ulcer is spreading, and the prognosis none of the most favourable.

If any one case is more perplexing and distressing to a surgeon than another, it is that in which secondary hæmorrhage occurs to mar his operations, destroy both the *physique* and the *morale* of his unfortunate patient, and undo in a few hours what Nature and he have been days or even weeks in getting done. We have chapters, and essays, and disquisitions, and pretty little theories by the score, upon the causes and nature of secondary hæmorrhage; but there is something rotten in the state of Denmark after all, and, in very many cases, the why and wherefore of the bleeding are any thing but clear. When it occurs a few hours after an amputation or other operation, we can understand it, and so we can, or think we can, when it follows hard upon the separation of a ligature from a great arterial trunk. But when, as sometimes happens, the stump is almost healed, the ligature has come away for a fortnight or three weeks, and suddenly a gush of blood tears up, we might almost say, the cicatrix of the wound, when the hæmorrhage takes place in this manner, it would puzzle even the most "bookish theoretic" to explain the quo and quomodo. The case which occurred some time ago at St. George's Hospital, and which we related at the time, furnished a good illustration of the difficulties which environ this interesting subject. In that case, a ligature was applied on the femoral artery for popliteal aneurism, which separated without the least accident at the termination of a fortnight. Fourteen days after this, hæmorrhage suddenly occurred, and the artery was tied higher up. This second ligature remained upon the vessel for three weeks, and all was doing well, when suddenly, thirteen days after its separation, hæmorrhage again took place, and ultimately destroyed the patient. There was no sloughing of the wound, no ulceration, then why should the artery give way, in both instances, almost on the very same day?

well as progressive. The history of the human species indeed teaches us that intellect has been marching and counter-marching from the earliest periods down to the present moment. Nor is a retrograde movement always unwise or dishonourable. Moreau's retreat through the Black Forest did him more credit than all his victories. Even Napoleon's return from Russia was, in our humble opinion, a wiser step, and the result of cooler reflection, than his proud and pompous march into that distant country. But however this may be, there can be no harm in casting a retrospective glance at the "march of intellect," in our profession, in order to see what useful things we have picked up or lost on the journey—what errors we have discarded—or what we have still allowed to remain undisturbed.

Walking up the Hampstead-road, the other evening, to inhale the fresh atmosphere of that place, and leave, for a moment, the dust, smoke, din, and distraction of the metropolis behind, we stopped to take breath opposite an humble stall, which, nevertheless, presented three different species of refection—old books, oysters, and soda water. The first was the only kind of food for which we had an appetite, and it appeared withal the cheapest—a matter of some consideration in these times. A small volume, minus one side of the cover, and marked "THREE-PENCE," attracted our attention. Its title ran thus:—"The STATUTES of the COLLEGE of PHYSICIANS of London, worthy to be perused by all men; but more especially by Physicians, Lawyers, Apothecaries, and Surgeons—and all such that either do, or shall study, Profess, or Practise PHYSICK. Anno Domini, 1693." Ill as we could afford the expense, we purchased the book; and, having derived considerable amusement, if not instruction, from the volume, we have tried to turn the purchase-money to some little account, and to see whether these same STATUTES might not be converted into a more saleable article, by a little brushing and scouring.

95. MARCH OF INTELLECT—RETROSPECTION.

We do not see why the "march of intellect," like the "march of an army, should not be sometimes retrogressive as

It somewhat surprised us, who have great veneration for the "wisdom of our ancestors," to learn that, so far back as 1693, there were corruptions in Colleges—and patriotic reformers to expose them. The editor dedicates his work to PARLIA-

MENT, "in whose determination the people of England, calmly, contentedly, and conscientiously acquiesce."

"Though the corruptions and perversions of ill men have frequently subverted your most Generous Designs for the Public Good, to their own base and private Interests; among the number of which, it were heartily to be wish'd that the most Noble and Necessary Art of *Physick* were not prostituted and perverted by the avarice, pride, and oppression of a few, who not content privately to enslave and abuse men, by exacting, &c. &c."

We almost fancied ourselves once more in the Freemason's Tavern, listening to the patriotic effusions of a modern editor and reformer; but we soon found that the periods were widely distant, though sentiments and circumstances were nearly the same.

It appears that the Editor of the Statutes was an ill used man in his time. He was a practitioner in *PHARMACY*; but naturally wishing to rise in his profession, he entered himself at Oxford or Cambridge, and, after a time, presented himself before the College of Physicians, and was three times examined by the President and Censors, with satisfaction to all parties. This preliminary over, he "visited all the Fellows, in order to be admitted Licentiate," and was graciously received, but requested by the said Fellows "to suspend his admission of Licentiate till such time as he had quitted his employment in pharmacy, and completed his degree (being then Bachelor in *Physic*) of Doctor in the University." He was assured that *then* he would be received, without any further examination, let, or hindrance. The good easy bachelor acquiesced, and completed his degree in the English University; but, to his astonishment, found that a new bye-law had been enacted, in the interim, by which he was cut off from the licence!

Now we adduce this hard case, in order to demonstrate the "march of intellect," as well as the progress of more liberal sentiments. Such an occurrence could not, would not, take place in these enlightened days. The license—nay, the fellowship would not be denied, under such circumstances, in the present times.

But we must now glance at the Statutes, including the bye-laws, of the College, as existing in 1693, and see

whether the "march of intellect" has been steadily progressive, or occasionally retrogressive, since that period. The first extract which we will make contains information that is of some importance.

"Let all the Statutes be divided into three parts or sections, the first part comprehends all these things which belong to the Electors, to the President, and Pro-President, to the Consilarii or Assistants, to the Censors or Governours, to the Comitia or Meetings, and other things, till you come to the Ninth Chapter, which treateth of the Office of the Treasurer.

"The second part comprehends those Statutes which belong to the Treasurer and Register, to the number of Fellows and Candidates, to their Examinations, Elections, and Admissions, to the Order of the Permissives, and their Office, and the other things, even to the Two and twentieth Chapter, which treateth of the Penal or Moral Statutes.

"The third part shall contain the Penal or Moral Statutes, and according to this threefold partition of Statutes, they may be read thorow in all greater Meetings except on the day of Meetings of St. Michael, at which time the Election of Officers are appointed.

"Let the Fellows, Candidates, and *Permissives*, be present at the Reading of the Statutes, as many as can be there."*

Now, from this document it is evident that, a century and a half ago, the Licentiates were summoned, in common with the Fellows, to hear the President read the laws common to the whole College as well as applying to themselves. Here then there was some connecting link left between the Licentiates and the College—the wall of brass had not been raised between them and the Fellows—and they were monthly made acquainted with all laws touching themselves or their brethren. Considering that the Licentiates, at that time, were characterised as foreigners—as men not graduated at Universities in this kingdom—as men "not eminently learned," &c. we do think that the statute which summoned them to the College, in common with the Fellows, to hear the laws of the insti-

* "Lectioni Statutorum intersint Socii, Candidati et *Permissi*, quot quot adesse Poterunt," p. 50.

tation read, was much more liberal and politic, than that which afterwards excluded them from all show of connexion with the said College. When the Parliament itself is voting for the removal of disabilities, grounded on ancient prejudice, would it not become the enlightened President and Fellows of the College to open the doors of that edifice, and admit, on some kind of terms, a large class of physicians, against whom there is not the shadow of plea, as to want of talents, or moral worth? Their returning disposition to peace and amity among all ranks of the profession, the consequence of re-action against a vile and demoniacal furor (*ira furor brevis est*) which made a temporary impression on their minds—and this is the time which should be seized by the College, to unite their Licentiate brethren with themselves, by a league befitting the spirit of the times and the progress of liberal sentiments.

The following Statute will excite a smile in these days.

“Let none teach the People Medicines, or tell their Names to them (especially if they are Vehement Medicines, as Purgers, Opiats, or Sleeping Medicines, or which cause Abortion, Vomits, or any other of greater moment or danger) lest by the abuse of them the People be injured; upon penalty of forty Shillings as often as they shall offend.

“He that bargains with Apothecaries for any part of the Price arising from the Medicines to be prescribed, shall be fined forty Shillings, as often as he shall so offend.

“Let no Fellow Candidate or Permissive, make use of those Apothecaries, who either themselves Practise Physick, or frequently serve those Physicians, who are not Examined and Approved, according to the Statutes of this Kingdom, under penalty of Ten Shillings, to be paid to the Colledge.”

If the above excite a smile, the following will certainly call forth a loud laugh.

“Because Apothecaries and Chirurgeons, but especially the *Chirurgeons*, often bring the Urine of Sick People to Physicians, and desire that from the Inspection of the Urine they would prescribe something for their Sick; and under this pretence of Consultation, manage the whole Course of Cure at their pleasure, whatever profit or gain there is; appro-

priating all to themselves, but bringing to the Physicians nothing besides that slender and hungry reward of *inspecting the Urine*.”

“Therefore, we admonish all Physicians, that for the future, they carry themselves much more wary in this matter, than heretofore was wont to be done of many; and for this Reason we forbid all Persons Practising Physick, that they do not prescribe any medicine to those *Idiots and Silly Women who carry the Pispots of Sick Persons about*, unless they have first known the Sick Person.”

The “march of intellect” is no where more conspicuous than in the contrast exhibited between the following statute and the present practice.

“Because it is found by Experience that the Apothecaries from the Prescripts of Physicians, *attain some pretence or shadow of false Knowledge* (everywhere boasting themselves to Sick Persons) which they abuse, not without the hazard of others, to their own profit; We Determine and Ordain, that no Colleague for the future, either Fellow, Candidate, or Licentiate, add Directions as they call them, to their Prescripts or Physical Scrollis (save only in Hospitals) but he shall leave them with the Sick, or at least take care that they be first signed and carried to his house; in the mean time let him command that the Medicines prescribed in the Scrollis be only signed with some agreeable titles or apt notes for their distinction, *to the intent that as much as in us lies, nothing at all be smelt out by this sort of Medicasters, with what design, intention, or for what uses the Remedies are prescribed.*”

A perusal of the above and many other statutes abundantly demonstrates how much things are now altered from what they were a century or two ago—and we entreat the president and fellows to reflect on the impolicy, not to say injustice, of still keeping up the rigid exclusion of the licentiates from all participation in the rights, privileges, honours, or offices of the College. It is with them as with the Catholics. A more liberal policy must one day be adopted—and there never was—there never will be, a more favourable moment than the present, for uniting two great classes into one harmonious body—with detriment to neither, and with certain advantages to both.

96. MEDICAL STATISTICS.

Modern records and researches would seem to hold out some prospect of immortality to man, even in this world. At all events, we may fairly hope that the "march of intellect" will slacken the pace of TIME, or so shorten the length of his scythe, that he will not mow down one half the number which he has been wont to do. Whether this change may be attended by a proportionate increase of happiness among mankind, is another question, and one which we cannot pretend to solve. Dr. Bisset Hawkins will certainly contribute to lower the premiums on life insurance, in this country, though peradventure his *assurances* may ruin some of the numerous companies which must start on the prospect of the increasing longevity of mankind. It is not our intention, however, to enter on the laborious researches of the learned Doctor, as detailed in his recent Lectures, at the College of Physicians. We shall, in this place, glance at some medical statistics which have been laid before the Royal Academy of Medicine, by Dr. Vilermé, respecting the connexion of births and deaths with rigorous and mild seasons—scarcity of provisions—healthy or unhealthy places of residence—political events—manners—industry—in a word, the entire state of civilization. The author comes to the following conclusions, as far as PARIS is concerned. The actual annual mortality of its inhabitants is 1 in 32. In the 17th century it was 1 in 25 or 26. In the 14th century it was 1 in 16 or 17.

Formerly the deaths in Paris considerably exceeded the births:—now, the latter predominate. There is one birth annually among every collection of 29 or 30 inhabitants. The maximum of mortality, at present, is in the Spring:—formerly, it was in the Autumn, especially in the months of August and September. There are more male than female still-born children—and there is greater mortality, during the first three months (after birth) among the former than the latter. "The month of June shows the maximum of conceptions and the maximum of births." It is difficult to account for this fact; for if most conceptions take place in June, most births should occur in March or April. Indeed, we imagine

that *maximum* in the latter part of the sentence should be *minimum*; for immediately afterwards we have the following statement.—"Le mois de Mars et d'Avril sont ceux qui présentent le plus grand nombre de naissances."

The opulent and the indigent classes of society present great differences in respect to relative mortality. Thus, in the richer quarters of the capital, there is 1 annual birth to 41 inhabitants. In the poorer quarters there is 1 birth to 29 or 30 of the population. In this calculation, the children of the poor, born in hospitals, are not taken into account. These would, of course, greatly increase the number of births among them. Nevertheless, it is found, that among the opulent classes of society, there are more children living under the age of 5 years, than among the indigent:—the inevitable conclusion is, that, although the poor people beget more children than the rich, they do not preserve so many.

Of 100 children abandoned (this must allude to asylas for the illegitimate) 60 perish within the first year. This ratio of mortality, however, among "*les enfans trouvés*," is annually diminishing. Scarcity or famine greatly diminishes the number of births. The fecundity attendant on marriages has been regularly diminishing during the last hundred years. The reasons assigned by the author for this decrement, we shall give in his own words. "C'est aux froids calculs de la fortune, c'est aux prévoyances extrêmes suscitées par le goût du luxe ou par l'amour de l'aisance qu'il faut sans doute en attribuer la cause."

The talented author passes in review, year by year, since 1680, the great moral, political, and physical events which have occurred in Paris, and their influence on the population. The general conclusion is:—"that, each time the people suffer, whatever may be the cause, the number of deaths is increased—the number of births is diminished, and the mean duration of life is curtailed. On the other hand, whenever the people are happy, the reverse of the above obtains."

Not being acquainted with all the data on which Dr. Hawkins founds his cheering prospects of increased health and longevity, we shall not attempt to invalidate his positions; but we shall

take the liberty of commenting on a few points which happen to come within the scope of our own observation. The Doctor appears to us, to attribute a great deal more to medical art in the preservation of life, than he is justified in doing. Thus, he says, that in fevers, if left to themselves, there would probably be about one death in two; while treated according to modern scientific principles, *six out of seven*, or even *eleven out of twelve* will be saved! We are extremely sceptical as to the soundness of this position—nay, we verily believe, that taking all circumstances into account, nearly as many fever patients would recover on *whew*, as on the most costly and polypharmic treatment that modern medicine could devise. The Doctor evidently looks to the favourable side of the question on all occasions. We shall only be able to glance at one or two illustrations which he brings forward. “To mark the improvement of health in our navy,” says he, “we may compare the fate of Commodore Anson’s crew, with a ship placed in *similar circumstances* about fifty years afterwards. Anson passed 143 days at sea, without touching at any place of refreshment. On his arrival at Juan Fernandez, half of his companions alone survived; and of the remaining 200, only eight were efficient. But, in 1794, the *Suffolk*, a 74 gun-ship, during 162 days, had no communication with land, and arrived in India without the loss of even one man.” But surely Dr. Hawkins is not in earnest when he makes the *Anson*, struggling round Cape Horn, against adverse winds, and among dreary, barren, and dangerous rocks, where hope was extinguished and human strength exhausted—to be *similarly circumstanced* with the *Suffolk*, sailing on velvet, before the balmy trade winds to the land of pagodas, at the beginning of the war, in which every common sailor expected to make a fortune! Perhaps, in the whole annals of navigation, from the *Periplus* of Hanno, down to Parry’s “*Noctes Atticæ*,” among the ice-bergs, so remarkable a contrast could not be found as that presented by the *circumstances*, moral and physical, in which the crews of the *Anson* and *Suffolk* were placed. But, let us come down nine or ten years later, and see what happened. A frigate, just fitted out with a wretched

heterogeneous crew, was despatched, without an hour’s preparation, for the East Indies, in order to give notice of the new war which broke out in 1803. That ship went to the East Indies, without losing a man, without presenting a single symptom of scurvy, though the crew lived on salt-junk during the whole of the voyage. Here, says Dr. H., is a fine illustration of my position. Softly, kind Sir! Two other ships were fitted out for the East India station, immediately after the one alluded to; but they were stored with lime juice, and every thing that could be supposed contributing to health on a long voyage. They sailed, and they arrived at Madras complete lazzettos, the crews being eaten up with scurvy and scorbutic ulcers! In short, they were pretty much in the condition of the *Anson*’s crew. How is this to be accounted for? Readily enough. The first ship that sailed was peculiarly fortunate. She took prizes in every parallel of Latitude, and the crew were elated beyond measure at the success already obtained, and the prospect of its continuance. The other two ships sailed with similar hopes; but they were cruelly disappointed. Not a Frenchman ever crossed their track—not a shilling of prize-money did they make! The consequence of these mental depressions were corporeal diseases.

Dr. B. seems to pity the Roman Legions, who had only one medical officer to three or four thousand men. They were still worse off, we should imagine, at the siege of Troy. But when we reflect on the powers of dame Nature, and the hardy constitutions of those times, we doubt whether the paucity of Doctors made much difference in the general average of mortality. In ordinary circumstances—in accidents—and in inflammatory diseases, medicine is very powerful; but when the epidemic influence has once gone abroad in the atmosphere, small is the share which the most consummate medical skill has in checking the mortality. The plains of Bengal, the islands of the West, the swamps of Walcheren—nay, the very rock of Gibraltar, which is quoted by Dr. Hawkins, afford melancholy proofs of the position here mentioned. The increase of longevity, then, we are inclined to attribute to moral and physical causes

which are little under the control of medical art. Indeed, we are forced to agree with M. Vilemè that—when people are *happy* they will be healthy and long-lived, and *vice versa*.

97. EXTRAORDINARY INSTANCES OF SUPPRESSION AND RETENTION OF URINE.

In Hufeland's Journal for August, 1827, there is an extraordinary case related of a young lad who made no water for seven weeks, and who suffered little or no inconvenience from this extraordinary suppression. There was no vicarious secretion in this case. Catheters were introduced into the bladder, but no urine could be found. Dr. Racum (of Riga) after failing with all other medicines, restored the urinary secretion by a mixture of oil of amber, venice turpentine, and balsam of capivi.

In another German Journal; there is a case of *retention* quite as extraordinary. The patient was a young lad of 13 years of age, who experienced a severe paroxysm of fever, in October, 1822, followed by a miliary eruption, which was repelled by exposure to cold. Another paroxysm ensued, and great debility was the result. On the 20th November, he was seized with violent pain in the rectum, which was greatly aggravated by attempts to pass any fecal matters. In the beginning of January following, the constipation still continuing, the urinary secretion became extremely scanty, and at length ceased for fifteen days. This cessation, and for a similar space of time, recurred twice afterwards. In March, 1823, the urinary discharge ceased again, and none was passed for *six months* afterwards! In July, the boy was found to be extremely emaciated, the bowels being obstinately constipated, and there being periodical pains in the loins, which were so severe as to throw him into convulsions. Nothing unusual could be discovered about the urinary passage, or rectum. The abdomen, however, was greatly distended, but not apparently with fluid, as it emitted a hollow sound when struck. On exploring the rectum there was felt, on each side, an elastic tumour, the nature of which could not be ascertained. Dr. Berres introduced

a very fine catheter, the urethra being extremely contracted, but could not draw off any urine. Medicines only exasperated his sufferings. He was taken by his father to Pest, where he was examined by several physicians and surgeons. While there, the water commenced flowing in large quantities—the abdomen shrunk in proportion—and the boy got well.

We cannot but conclude, that this was retention, rather than suppression of urine, but it is difficult to believe that such retention could last so long without destroying life. There does not, however, appear to be any reason for deception, either on the part of patient or practitioner, in this case.

98. SIMULTANEOUS EXTRA, AND INTRA-UTERINE FETATION.

The following case is communicated by Dr. Detwiller, to the Philadelphia Journal of Medicine and Surgery.

Mrs. Kremer, aged 33 years, became affected, a few months after marriage, with pain in the left side of the abdomen, low down, accompanied by gradual enlargement of the abdomen and mammae—nausea—vomiting;—but regularity of the menses, for nearly two years, when they ceased. On the 6th January, 1825, Dr. D. found the patient labouring under violent pain in the abdomen, urgent desire to make water, vomiting, constipation, hard full pulse. The remedies used need not be specified. On the 23d of April, she was again examined, and Dr. D. found the left ovary much enlarged, hard, but without tenderness. The distended uterus could also be felt, independent of the enlarged ovary. Pregnancy proceeded, and the woman was delivered of a living, healthy child, on the 22d of October. On the 3d day after delivery, the ovarian tumour became painful—inflammation came on, with corresponding febrile symptoms, and the patient died on the eleventh day after delivery.

Dissection. Eight pints of serous fluid were found in the abdomen. The left ovary was found greatly enlarged, extending into the right hypogastrium, and

covering the uterus. In the right side of this tumour was an opening, through which, a fluid, similar to that observed in the abdomen, issued on pressure. There were gangrenous spots on the intestines, as well as on the uterus. The left fallopian tube was pervious, but the corresponding ovary was dropsical, and on laying it open, the crowns of four molar teeth and two incisors came into view—the former attached to an irregularly shaped piece of bone. Throughout this cavity were interspersed a number of whitish hairs, some of them in tufts. A number of bones, of various sizes, were found imbedded in the more solid parts of the ovarian tumour, but none of them presented the shape of human bones.

In the Philosophical Transactions, there is the case, of a woman who carried an extra-uterine fœtus 18 years, in which time she was safely delivered of a living child. Two other cases, of nearly a similar kind, are also related in the same collection.

An interesting case of extra-uterine fœtation has recently been recorded by Mr. Tilt, (of —, Gray's-Inn Lane,) in the May No. of the Medical and Physical Journal. A woman, aged 37, was exposed to much fatigue, in the third month of her fifth pregnancy, when she felt something give way internally, followed by a discharge of blood from the vagina, vomiting of the same, anorexia, tenderness of abdomen, retention of urine, and obstinate constipation. These symptoms required purgatives, and the use of the catheter for some time. It was nearly five months after the commencement of these symptoms, when Mr. Tilt saw the patient, she being then emaciated, and her strength greatly exhausted by frequent vomiting, a fetid discharge from the vagina, and incessant abdominal pain. She was apparently as large as in the seventh or eighth month of uterogestation. Little doubt was entertained as to the real state of the case, and the patient soon afterwards died.

Dissection. Dr. Davies, Dr. Dill, and Mr. Bell, assisted Mr. Tilt in examining the body. The skin was jaundiced—the extremities slightly œdematous. On opening the abdomen, a large quantity of bloody fluid escaped. The peritoneum was highly inflamed and thickened—

small intestines pushed up against the diaphragm. Between the uterus (rather larger than in the unimpregnated state) and the intestines, lay the fœtus, involved in its membranes, the placenta being exterior to, and betwixt them and the arch of the colon. The membranes being opened, the fœtus appeared to be rather smaller than one at full term. The appearances on the surface led them to think, that the child had been dead some time. The chorion and amnion were perfectly natural. And exterior to these lay the sac, or ventral uterus, within which, the fœtal mass, with the exception of the placenta, lay. The walls of this sac were three lines in thickness, and perfectly smooth within. The placenta was of enormous size, and very extensively attached, weighing five pounds. It adhered with great tenacity to the sac. It communicated freely with the left mesenteric and emulgent vessels, and its supply of blood must have been very liberal. The uterus was large, but presented no appearance of having been ruptured. About the middle of the left fallopian tube, its coats were ulcerated for about an inch and a half. Mr. Tilt has made a great many ingenious observations on the above case, for which we must refer to the original paper.

99. DR. LAMBE ON THAMES AND RIVER WATER.*

For not to know at large of things remote
From use, obscure and subtle, but to know
That which before us lies in daily life,
Is the prime wisdom. *Milton.*

There being now but one opinion as to the impurity and insalubrity of the water with which a considerable portion of the metropolis is supplied, the minds of men are naturally led to inquire into the remedy. Dr. Lambe, who has long turned his attention to the properties of water and its extraneous admixtures, now presents us with a pamphlet, in which he has taken great pains to examine the water of the Thames, not only about London, but

* An Investigation of the Properties of Thames Water. By William Lambe, M. D. 8vo. sewed, p. 65. 2s. 6d. 1828.

higher up, and beyond the reach of the tide—consequently where the Thames is in the same condition as other rivers. The inquiry is therefore interesting, as affecting not merely the water of the Thames, but of the New River, and, indeed of every river. The following “GENERAL CONCLUSION” we shall extract.

“The result of the examination of the Thames water at London, has proved that every product of it which can be obtained and exhibited in a distinct form, is tainted, or to speak more truly, is wholly composed of the *exuvia* of animal and vegetable matter. We have extracted bodies which can be traced to no other origin out of the soluble saline matter; out of the insoluble residuum; out of the hardly soluble sulphate of lime; finally, out of that insoluble matter separated by simple boiling, and improperly called carbonate of lime. We have shown that the insoluble residuum itself is partly at least, if not totally, volatile at the low degree of heat of boiling water, a property which distinguishes it completely from all common earthy matter, and entitles it to be ranked among organic bodies. We have extracted from it oily substances, which can be traced to no other source than to the accumulation of organic remains. Finally, we have extracted abundantly the constant residuum of organic bodies, a charcoally matter, by the simple process of solution in acid (under peculiar circumstances) which I conceive could never happen but with a water deeply and incurably tainted with heterogeneous substances, deposited from the filth with which it is incessantly mingled. No man, therefore, I should think, who calls himself a chemist, or who aspires to the more exalted title of a philosopher, can have the hardihood to deny that this water is loaded with animal and vegetable putridity, in as high a degree as it is possible, in any which the human organs can sustain. And all those who, thinking with me, consider such matters to be deleterious and destructive of animal life, must join in condemning it as unfit to be applied to any dietetic purpose whatever.

“If we trace the river higher up to the point where the tide nearly ceases to be observed, strong presumption has been afforded that the same mischief predominates, but in a somewhat mitigated form. Circumstances which have been

already detailed have prevented my acquiring the evidence on this point which it was intended and desired. But I entertain no doubt that it will be established, that the pollutions of the river received at the metropolis are carried upwards as far as the influence of the tide extends.”

The water of the Thames at Windsor, does not appear to have been so minutely examined as the London water; but our author seems to conclude that both it and all other rivers “must become loaded with whatever soluble matter an abundant putrefaction can supply, wherever the said river or rivers run through a rich and fertile country with a dense population.” While we cannot deny that a certain proportion of foreign and corrupt matters must necessarily exist in all streams that run through fertile soils, and near the habitations of men and animals, yet we apprehend that we can only balance between the greater and the lesser evil—and that we must and ought to be contented, if we can procure our general supply of water from such a running stream as does not pass through any large town. Dr. Lambe observes that there are only four modes of purifying foul water—chemical agents—boiling—filtration—distillation. The two first are out of the question; but, “filtration through charcoal frees water from putrid and perhaps from putrescent vapour, and so far must be preferable to every other mode of filtration.”*

But DISTILLATION is considered by Dr. Lambe as the only process which can render water perfectly pure and perfectly wholesome. Dr. L. has brought forward a considerable number of cases illustrating the beneficial effects of distilled water on cancer and other local affections; and the Doctor pretty openly accuses Mr. Abernethy of stealing from him the facts

* The ingenious apparatus invented by Messrs. Robins and Co. appears to us to be the best filtering machine yet put to use. It fits into the reservoir, and therefore all the water used by the family for culinary purposes, must pass through the filter, which renders the water (and we have now used the apparatus for some months) as clear as crystal, and without taste or smell. We strongly recommend this filter to every family.

and information, "which have formed the ground-work of his present opinions." Dr. L. does not propose any scheme by which distilled water might be afforded, on a large scale, to the metropolis; the process, therefore, of distillation can only apply to that portion of water which is drunk by each individual, and this must be purchased. The present price of distilled water is 4d. per gallon; but Dr. L. thinks it might be procured at one fourth of that sum. The conclusion to which most men, we think, will come, is, that water should be supplied from a running stream, as the New River is now supplied; and that we must put up with such impurities as the filter cannot remove from it. We shall never cease, however, to hold up our hands against the Thames water taken up nearer than Windsor.

100. CONSOLATION FOR ENGLISH MEDICAL MEN ON THE CONTINENT.

The CLINIQUE DES HÔPITAUX, in one of its numbers for October last, copies one of those "SCENES," or theatrical representations, [misrepresentations,] for which a weekly journal, in this country, is so famous; namely, certain dialogues, said, by the veracious journal, to have occurred between Sir A. Carlisle, Mr. White, Mr. Harding, and a little boy who was undergoing the operation of lithotomy in the Westminster Hospital. Our simple Parisian *confère* takes it all for Gospel, as dressed up in the English journal; and then makes the following reflection on English teachers and English *pupils*.

"Le journal Anglais blâme severement la conduite de ce medecin, et des *eleves*. Quel nom donner, en effet, à un oubli pareil des convenances? La *grossiereté*, l'ignorance, la *cruauté*, ne sauraient être portées plus loin. Nous sommes heureux de ne pas rencontrer de semblables scenes en FRANCE; elles dishonorent un medecin, et l'on ne peut que gemir d'être obligé de les faire connaître."

Such is the character for *coarseness*, *ignorance*, and *cruelty*, which is to meet the English medical man wherever he travels on the Continent! And why is France so happy as not to witness such scenes as the above? Because neither FRANCE, nor any portion of this globe,

except England, is, or has ever been, so unhappy as to produce a monster capable of inventing them!

101. VINUM COLCHICI.

We have received several communications from chemists, complaining that they are in a dilemma respecting the mode of preparing this medicine, now become so important an article in practice. Thus Dr. Williams, in his work on Colchicum, directs two ounces of the dried seeds of colchicum to be infused, for eight or ten days, in a pint of sherry, and then to be strained. Dr. Thomson, in the last edition of his Dispensatory, orders 3iss. of the dried bulb, or 3j. of the dried petals or the seed, in 3xij. of white wine. The College of Physicians directs a pound of the fresh root, four ounces of proof spirit, and eight ounces of distilled water—that is, a pound of solid to twelve ounces of menstruum! It is evident that this was meant for a poultice—for a wine or tincture it cannot be. Indeed, one of the first chemists in London publicly says the medicine cannot be made. At all events, it is clear that no two formulæ of this wine are of equal strength; and as physicians and surgeons do not make allusion to any particular formula, the chemist is left to make the preparation in any proportion that suits his taste. We have reason to believe that there are twenty different formulæ in this metropolis for the wine of colchicum!

It is curious that Dr. Thomson translates the formula of the London Pharmacopœia thus:

"Take of the fresh root of colchicum, bruised, *two ounces*; proof spirit, *twelve fluid ounces*; distilled water, *twenty fluid ounces*. Macerate for 14 days."

The formula in the Pharmacopœia runs thus:—

Rad. colch. recent. . . lbj.
Spir. ten. fl. 3iv.
Aquæ distill. 3vij.

Thus the original directs a pound of the root to twelve ounces of fluid—the translation makes it *two ounces* of root to *thirty-two ounces* of menstruum!

Such is the glorious uncertainty of physic—or at least of colchicum! We

would recommend Dr. Williams' formula, when the seeds are used. In respect to the root, Dr. Thomson's formula appears as extravagantly weak, as that of the College is preposterously strong. Four ounces of the fresh root, or two ounces of the dry, to the pint of menstruum, would probably be a good standard.

As for the confusion among chemists and druggists, in consequence of the troy and avoirdupoise weights, it is beyond all description! It is fortunate that medicines admit of much latitude in their doses, and that many of them have little or no operation, otherwise the half the community would stand a chance of being poisoned by the mistakes that are daily made.

P. S. Since writing the above, we learn that the *vinum colchici*, as directed by the College, may be, and is made, by means of an hydraulic press, in the house of Messrs. Herring, brothers, of Aldersgate Street. They use wine instead of spirit and water, and, by means of the said press, they obtain one fourth more of the filtered and saturated wine than is originally employed. Thus, if 40 pounds of the fresh root of colchicum be infused in 40 pounds of wine, there will be 50 pounds of *vinum colchici* procured by the hydraulic press. We have no doubt that *this wine* is infinitely superior to the common *v. colchici*, procured in the usual way. It must contain the whole juice of the root. We learn that Messrs. Herring find the wine a better menstruum than the spirit and water, as it keeps. It is hardly necessary to say, that those who have not an hydraulic press, cannot make the *vinum colchici* according to the London Pharmacopœia.

102. GASTRO-ENTERALGIA. By M. Lx-GALLOIS.

Our readers will remember that we gave a full analysis of M. Barras' excellent work on "*Gastralgia mistaken for Gastritis*." This mistake is daily made on both sides of the Channel—especially since the doctrines of Broussais came to predominate. The following case, in high life, is not without parallels, we have reason to know, upon English soil.

Case The Count DE C. aged 63 years, of bilious temperament, and subject, for several years, to a "*hyphondriac gastro enteralgia*," had the imprudence to swallow, while in a state of perspiration after hunting, some cold drink. In a short time afterwards, he experienced very acute pain in the region of the duodenum, sense of constriction at the epigastrium, and yellow suffusion on the face. Two HUNDRED LEECHES were applied in different relays, while warm baths, emollient lavements, sinapisms, and tartar-emetic ointment were employed on the surface. The pain ceased, but a state of great depression supervened. The skin was dry, the cheeks coloured, the muscles of the face were convulsed, the tongue was moist. The sense of constriction at the epigastrium was rather relieved than increased by pressure. The abdomen was contracted, the pulse small and quick, the intellectual faculties weakened, and the muscles of one arm tormented with spasms. At this period, Dr. Serrieres was called in, and found the region of the spleen very full and pulsating, and the colon loaded with indurated fæces. A purgative enema brought away large quantities of dark, fetid, and scybalous matters. Considerable relief followed; but at the next visit, Dr. S. found the patient in a state of stupor and delirium, with cool skin, and pulse scarcely perceptible. The case was now considered as most desperate. Three grains of James's powder were exhibited, and brought out a general perspiration, with elevation of the pulse. In a few hours afterwards, the dose of James's powder was doubled, and several black stools were evacuated. The symptoms were now greatly mitigated. The medicine was continued—a copious sediment was precipitated, and the disease took a critical turn. In a fortnight from the commencement of the attack, the patient was apparently in a state of convalescence. In two days after this favourable report, things took another turn. The sinapisms which had been discharging freely, were observed to become suddenly dry, followed by pain in the hypogastric region, dysury, scanty and red urine, sense of burning in the urethra. These symptoms were met by gentle means, and in ten days he was again convalescing. He was now allowed wine, and abused the indulgence, in consequence of which

he had two relapses, in one of which he was nearly moribund, but was saved by bark, valerian, assafoetida, and stimulants. After various vacillations, ascites took place, and the water was obliged to be drawn off. When paracentesis was a second time deemed necessary, a copious flow of urine and perspiration produced resorption of the effused fluid. In three months from this time, the patient was restored to health.—REV. MED.

“What would have become of this patient, M. Legallois asks, if he had continued under the hands of a physiological physician?” The disease, from first to last, would doubtless have been considered as gastro-enteritis, and the patient would probably have perished under leeches and starvation. The ultra-depletion produced by two hundred leeches, for spasmodic pain in the stomach or bowels, resulting from cold drink, was most injudicious. A large dose of opium and camphor would have saved a great deal of the miseries which the poor Count was destined to undergo from the Sangrado practice first instituted.

103. MORBID ANATOMY OF THE LUNGS.

[Lectures attributed to Mr. Abernethy.]

In pursuing our criticisms on the doctrines and practices said to be inculcated by Mr. Abernethy, in his lectures, and long circulated among the profession without any contradiction of their accuracy, we again declare that we do not mean to tax the lecturer with any false-doctrine or mala praxis, but merely to examine the lectures which are put forth in his name. Considering the length of time which has now elapsed since these lectures were first disseminated through the medium of the press, it certainly appears to us unaccountable that, out of so many thousand pupils as Mr. A. must have had in the last 20 or 30 years, not one should come forward to challenge or point out the discrepancies between the real and the spurious lectures! But to business.

The lecturer (always meaning the assumed lecturer) informs us that the lung is “one of the organs in which, when diseased action is produced, the disease is tubercular, as in the liver and spleen.”

Thus under the head of “morbidity of the lungs,” there is no notice taken of any of those structural changes which we daily see in the respiratory apparatus—except TUBERCULATION! After this, we cannot wonder at the following sentiment.

“This morbid anatomy which people dread so much, does not appear to me to be of primary importance in the study of our profession, there is such a great diversity of appearances; but organs of certain construction are liable to certain diseases, and those are easily recognised; the grand thing to be attended to is, that what produces a state of irritation, and brings on a state of vascular action, will cause those diseases.” 397.

These are the sentiments indeed which we have re-echoed in our medical societies. Morbid anatomy! Pooh! It is not worth a thought. The real reason for this contempt of pathology we shall presently show.

“Now, with regard to the lungs, what can produce an irritable disease of pulmonary irritation? I am very well convinced, that stomachic irritation will; and I am very well satisfied that this is the primary state of the disease. I know that many gentlemen who have been educated at this hospital, have obtained very considerable credit to themselves, in curing or relieving some consumptive people by putting their stomachs to rights. I cannot tell you *all the cases* that I have known of this kind, but *one* I will tell you of, and this was the very first thing communicated to me, which produced those crazy opinions that have predominated in my mind ever since: there was a gentleman who attended these lectures, just about the time I first began to give them; he was a young Highlander, and a more intellectual or honourable man I never met with; he went to settle about five or six miles out of town, and both he and myself being young, I used to go to see him, and he used occasionally to come to see me. Once when I went to see him, he said, “O, good God, what would I give for your opportunities! When we came first to this country, our books were crowded with consumptive cases, and I am convinced that consumption begins in the liver; I wish you would send me down some consumptive people; I will pay for their board, and attend them for

nothing.' Now this being a clear-headed man, I listened to what he said, and I did send him down some patients; *but he could not cure them*, though he certainly did relieve them."

When we found that only one case was to be selected, out of the innumerable cures of consumption through the medium of the stomach, we did expect that it would be what Goldsmith would have called a "*thumper*." But, after all, it turns out to be merely the transfer of some consumptive patients from Mr. Abernethy in London, to the "intellectual highlander," six miles in the country—where, by the way, the patients were "not cured," but only "relieved"—a very convenient phrase long used in hospitals, when patients go out *nearly* as well as when they came in! Whether the relief in question resulted from the stomach-medicines prescribed by the "intellectual highlander," or from the *change of air* from town to country, we leave to the judgment of those who have made any observations on the effects of such changes.

The lecturer admits that, in some cases, there may be disease both in the lungs and stomach—"but then, what does that prove? it does not prove which of the organs is the most diseased." Certainly not. Nor does it prove the priority of disease in one organ rather than in another. The following passage affords a fine specimen of what may be called the *surgical pathology* of phthisis.

"But can consumption be cured? Odd bless me, that is a question which a man who had lived in a dissecting-room would laugh at: how many people do you examine who have lungs tubercular, but which are otherwise sound. What is consumption? It is tubercle of the lungs; then, if those tubercles were healed, and

the lungs otherwise sound, the patients must get better. But if the enquirer shifts his ground, and says, it was the case I meant of tubercles over the whole of the lungs, why then he shifts his ground for no purpose; for there is no case which, when it has proceeded to a certain extent, can be cured. Therefore I say consumption may be cured, according to surgical principles, by creating local irritation on the side of the chest, and so on." 400.

Now the jet of the whole doctrine appears to be this:—stomach disorder is the primary state of disease in phthisis—ergo, cure the stomach-disorder, and you cure consumption. And as blue pill will cure stomach-disorder why have recourse to any other medicine?—why trouble our heads about any other pathology, seeing that stomach-disorder is "the primary state of disease" of the lungs in pulmonary consumption? This reasoning is very plausible; and is very similar to that which was employed by the founder of our ancient and excellent ally the Turks. When Amru, the Mahomedan general, issued his mandate to burn the Alexandrian library, a deputation of literati waited on him, to dissuade him from his purpose. He asked them if the library contained any other books than the Koran; and being answered in the affirmative, he observed that, as the Koran contained every thing that was *necessary* to be known, so all books containing more than the Koran were *unnecessary*—and therefore he ordered the library to be burnt. The principles of Amru and Abernethy are precisely similar. Stomach-disorder is the cause of consumption—blue-pill and black-draught will cure stomach-disorder—ergo, all other pathology is erroneous—all other medicine is unnecessary.

HOSPITAL PRACTICE.

104. HÔTEL DIEU.

As the taste of the day is decidedly in favour of hospital cases and hospital reports, we shall endeavour to make this department of the Journal as extensive as we can. There are several *velocipede* vehicles running in the same

line of road with ourselves, but as the wares they carry are more exclusively of English growth, we shall generally prefer articles of foreign manufacture; in other words, we shall make it our business to give a full account of the practice of the French hospitals. Hospital reporting is of much more ancient date abroad, and

particularly in France, than here, and as far as the recording of practice is concerned, is carried on in a superior manner. The details are not so crimped as ours, and the reporter is evidently not so haunted by the dread of a *dele* from that *lethalis arundo*, which mars his jokes, cripples his sentences, and plays the deuce with half a quire of the most luminous (qy. voluminous?) "original remarks!" This is sad work, and it must be exceedingly annoying to the feelings of gentlemanly young men to find their "observations" cut short, especially when they remember that they are paid by the length of them! However, the affair is none of ours, and we leave it to the parties concerned, editors and reporters, to settle it between them.

ABSCESS IN THE ILIAC REGION.

An abscess occasionally occurs in the right iliac region, apparently in the cellular tissue, which may open into the cæcum, vagina, or bladder. M. Dupuytren, who we verily believe sees every thing, has seen seven or eight examples of this disease, and the following is the description of the symptoms which it presents.

Pain, and circumscribed swelling more or less distinct in the iliac region, with feverishness, constipation, colic, nausea, hiccup, vomiting, all the symptoms, in fact, of an internal strangulation. There is a feeling of weight and uneasiness in the direction of the cæcum, and towards the anus, and after a little while fluctuation is more or less evident in the tumour. If the abscess bursts into the cæcum, vagina, or bladder, the tumour suddenly diminishes in size, and pus makes its appearance either in the stools, or in the urine, but sometimes, the abscess instead of taking any of these directions, travels across the parietes of the abdomen, and presents in the region of the kidney. This latter course is the most unfavourable; then that in which it opens into the bladder, whilst the most frequent and most favourable of all is its communicating with the cæcum.

The indications in the two latter cases, are to favour the issue of the pus, and allow the abscess to empty itself of its own accord. Strict regimen, perfect quiet, emollient drinks, and soothing local

applications, are the proper means to be pursued, and under these the disease for the most part has a fortunate termination. A young man entered the Hôtel Dieu in September, in whom the pus was evacuated both from the bladder and intestine, and yet in spite of this double complication he did extremely well.

When the abscess passes across the walls of the abdomen, M. Dupuytren has never seen an instance of recovery; the surgeon, therefore, should not be in any hurry with his bistoury or lancet, but allow Nature to take her course, and if possible form a communication with the rectum. The opening, when it forms, being in the lumbar region, and the base of the abscess below, in the iliac region, the pus does not escape freely, but becomes contaminated by the mixture of air, proving an active cause of inflammation, and frequently inducing a fatal peritonitis or symptoms of re-absorption of matter. Under these circumstances, M. D. recommends placing the patient on his belly, in order to favour the exit of the pus as much as possible.

It may seem odd that, when the abscess opens into the rectum, the feces and gas of the intestines do not escape into its cavity and produce unpleasant symptoms. Whatever may be the cause, whether the contraction of the abdominal muscles, the oblique and tortuous nature of the communication, or a portion of the gut itself falling down and acting the part of a valve, whether it be one or all of these circumstances it is impossible to say, but certainly the contents of the intestine do not escape from their proper cavity.

The affection is infinitely more common on the right side than on the left, which is evidently due to the anatomical relations of the parts. On the right side, the cæcum is comparatively little invested by the peritoneum, its posterior part is invested by a loose cellular membrane, and where it joins the small intestine (at the valve of the colon) a sudden contraction of the tube takes place, forming a kind of nest for the lodgement of irritating foreign bodies, as plumb-stones, cherry-stones, &c. On the left side the sigmoid flexure of the colon is of uniform calibre, and much more encircled by the peritoneum than the cæcum, whilst it is additionally strengthened by the aponeurosis of the iliacus internus mus-

cle. These considerations amply account for the greater prevalence of the affection on the right side than on the left, as well as for the abscess, when it does form on the latter side, not opening into the sigmoid flexure of the colon, but passing down towards the groin, and becoming liable to be mistaken by a careless surgeon for inguinal or femoral hernia.

One or two cases are given where M. Dupuytren detected the disease, and gave a correct diagnosis where other practitioners had been deceived. In one case, that of the son of the Comte de B—, there had been for several days, feverishness, vomiting, pains and tumefaction on the right side, symptoms which had led the medical man in attendance to pronounce the affection hepatitis. M. Dupuytren at that time had not seen much of the disease, but the circumscribed swelling in the iliac fossa, and the fluctuation made him suspect its existence. In the course of a few days a purulent discharge from the rectum confirmed the propriety of the diagnosis. —*Clinique*.

Any one who reads these clinical reports of M. Dupuytren's practice, must be convinced that he is an exceedingly shrewd observer of what is passing before his eyes. He is evidently a practical surgeon, and has very little indeed of that spirit of theorizing, which is the besetting sin of many of his countrymen. It is this which makes his "*Clinique*" so much *recherchée* in Paris, and gives a very great weight to what falls from his lips or his pen. A case very similar in many respects to the affection described by the Baron, occurred a few months ago at Guy's Hospital, and was talked of, and written of, in the Societies and Journals at the time.

Case. A young woman, of 19, was admitted into the clinical ward, under the care of Dr. Cholmely, with vomiting of yellow bile, relaxed bowels, small, wiry, and frequent pulse, hot and dry skin, and pain in the right iliac region, relieved by lying on the right side with the legs drawn up. Eight days previous to admission, she caught cold during the menstrual period, by washing in a damp cellar, when the catamenia suddenly disappeared, and four days afterwards she complained of acute pain in the right

groin extending up to the iliac region, with great tenderness on pressure. These symptoms led to the suspicion of hernia, but Mr. Callaway, who was called in, gave his opinion against the existence of that disease. During the three days preceding her admission, she was three times bled, and twenty leeches applied to the groin, and on her admission, the leeches were repeated, with calomel and opium every four hours, and clysters of castor oil. On the next day, she was rather better, but any attempt to lie on the left side produced severe dragging pain. *Treatment as before.* On the 12th, the pain and tenderness were severe, and 30 ozs. of blood were taken from the arm, when the catamenia re-appeared, but without affording relief. *Pill of calomel, opium, and tartarized antimony, with saline draught.* 13th. No better, pain and tenderness severe, with fulness in the inguinal and iliac regions. *Thirty leeches to the part—fomentation and poultice.* The pain, &c. in the iliac region continued, the pulse was rapid, the features sunken with nausea and sickness, but no constipation. Dr. Cholmely imagined, that there existed a deep-seated abscess between the muscles and peritoneum, and on the 15th, an incision was made a little above the anterior superior spinous process of the ilium, giving issue to a small quantity of sanious fluid, with fetid gas, and exposing a distinct cavity. Constant vomiting supervened, and on the morning of the 18th the girl expired.

Dissection. On the right side, the omentum adhered to the peritoneum, and formed a circumscribed cavity which contained some dark serous fluid; the peritoneum itself was black, but its surface was entire, and on cutting through it a large abscess was discovered, containing most offensive sanies. The psoas and iliacus internus were completely gangrenous, and the parts in the neighbourhood, viz.: a portion of the right lobe of the liver, part of the tunics of the kidney, the posterior surface of the cæcum, and ascending portion of the colon, were all of a black hue. The appendix cæci was dark coloured, and its internal surface ulcerated.

This is a very good example of that variety of the disease which M. Dupuytren describes as originating in the iliac

fossa, and passing up between the muscles and the peritoneum, in the direction of the kidney. The pain in the iliac region, the vomiting, the feverishness, and the fulness on that side very closely tally with the symptoms laid down by the French surgeon, whilst the unfortunate issue of the case completely verifies the gloomy prognosis which he draws in this dissection. Dr. Chalmers, it appears, has seen another case very similar to the present. A stout, healthy man, at Worthing, was attacked with the usual symptoms of nephritis and treated for that complaint. The disease then took a turn, and resembled enteritis, but in spite of the treatment had recourse to, he died in a fortnight from the day of attack. On examining the body, a large abscess was discovered behind the peritoneum, in the neighbourhood of the kidney and ascending colon, which had become gangrenous. — *Gaz.*

It is curious, that whilst the French surgeon recommends us not to meddle with the abscess, but, if possible, let it burst into the rectum or colon, the English Doctor thinks the only chance of saving the patient is by making early incisions; and giving vent to the matter as soon as it is formed. Of course, in such a case, we can only repeat the Virgilian line.

"Non nostrum inter vos tantas componere lites."

But we must say that we rather incline towards evacuating the pus, by an early incision.

Two or three years ago, we related a case similar in many respects to the abscess which M. Dupuytren describes as opening into the cæcum, but differing from it in this, that it also formed an opening by ulceration externally, allowing the fecal matter to escape, and constituting that most disgusting malady, an artificial anus. In the case we allude to, the abscess formed in the glands of the groin, and not in the cellular tissue; the symptoms were very severe, and the termination fatal. There is a patient at present, in St. George's Hospital, whose case comes very near indeed to those which have occurred at the Hôtel Dieu, the abscess having apparently originated in the cellular membrane of the groin, and opened into the cæcum.

Case. Grace Harris, æt. 21, was admitted into St. George's Hospital, on the 4th of May, under the care of Mr. Brodie, with an artificial anus in the right groin, of which she gave the following account.

About a fortnight before Christmas, she received a severe kick in the groin, which gave her much pain at the time, and, in the course of a month, she began to be affected with pain and throbbing in the part, increased on walking, and obliging her to keep her room. She applied to Mr. Acret, of Torrington-Street, who ordered her various medicines, and, subsequently, a blister, leeches, and fomentations. Four weeks, or thereabouts, prior to her admission, she first discovered swelling; it was fomented and poulticed, and, in a short time, a puncture was made by Mr. A. giving issue to nearly half a pint of the most abominably offensive pus. The abscess continued to discharge, and, at the expiration of a week from its being opened, she noticed fecal matter in the poultice. From that time, the evacuation of the feces took place, though not every day, through the opening in the groin, attended with a very relaxed state of the bowels, and much emaciation and debility. Since Christmas she had ceased to menstruate, and every two or three years, she had been subject to very severe attacks of what she denominated "liver complaint," which confined her to bed for several months.

On admission, there was observed a small sinuous opening, as large as a silver penny, about an inch and a half on the inside of the anterior superior spine of the os ilii. The integuments in the line of Poupart's ligament were inflamed, and bedewed with dirty-looking pus, of a fecal odour, which constantly issued from the sinus. There was little or no pain either in the part or elsewhere, except on the passage of the feces, when she felt a kind of gurgling and very disagreeable sensation in the groin. Her appearance was meagre, scrofulous, and hectic; she felt flushed and feverish in the evenings, and was harassed, towards morning, with a troublesome dry cough, which she had suffered from for several years. The pulse was quick and wiry, the tongue reddish, the appetite voracious. She was ordered saline draughts with the sulphate of qui-

nine, and, on the 19th, the discharge of fæces by the artificial anus having increased, rather than diminished, Mr. Brodie determined on laying open the sinus, and giving a freer vent to the discharge. This was done by introducing a director, and passing it for about an inch and a half downwards and inwards, in the line of Poupart's ligament, but above it, and as far as Mr. B. could judge, beneath the tendon of the external oblique. An incision was then made upon the extremity of the director, and the integuments, &c. divided along the groove to the opening of the sinus. On introducing his finger, Mr Brodie thought he could pass it downwards, under Poupart's ligament, into the cavity of a considerable abscess. The wound was ordered to be dressed with lint, tow to absorb the discharge, oiled silk, and a solution of the chlorate of lime to be employed in order to destroy the effluvia. On the 20th, the bowels being very loose, the saline mixture was discontinued, and chalk mixture, with aromatic confection and tincture of opium substituted for it. Next day, however, the former medicine was resumed, and, on the 23d, the improvement was very perceptible, the discharge, both of pus and fæces, having lessened, and the general appearance being much improved. She went on improving until the 2d of June, when the bowels were confined, and the girl altogether unwell. The quinine, &c. was ordered to be omitted, and the bowels opened with calomel and colocynth. On the 6th, she was doing extremely well; the discharge had materially diminished in quantity, and, for the last six or seven days, had been completely unmixed with fæces.

In this case, there were none of those violent symptoms of peritoneal or intestinal inflammation which ushered in M. Dupuytren's cases, as well as those which occurred to Dr. Chalmers. The case, however, is clearly one, in which an abscess formed in the cellular membrane, lying in the "iliac fossa," and formed a communication with some part of the intestine, most probably the cæcum. That the opening into the gut is not of great dimensions, we think is probable, from the discharge of fæces through it being comparatively small in quantity, and occurring only every other day. The gurgling, too, and pain on the passage of the

stool would seem to show, that the communication is not a very free one. The progress of the case since the patient was received into the hospital has been hitherto extremely favourable, and there seems every reason to expect that she will ultimately do well.

LA CHARTE.

105. DISEASES OF THE TESTICLE.

CASE 1.—*Sarcocoele of the Right Testicle—Amputation performed.* Auguste Shuiliers, æt. 27, of sallow, cachectic habit, entered the hospital of La Charité, on the 14th of June, 1827, under the care of M. Roux, for a disease in the right testicle, which had commenced in the early part of the preceding April. The testicle was about the size of one's double fist, the skin of the scrotum ulcerated in three places, and through the ulcerated openings funguses had sprung up, nearly an inch in diameter. There were some enlarged glands in the groin, and the spermatic cord was indurated and enlarged, almost as high as the inner ring, but no tumour could be distinguished in the abdomen. There were severe lancinating pains in the testicle and in the abdomen, whilst the stench from the former was most abominable.

After some hesitation, amputation of the testicle was performed, and, upon dissection it was found that the tunica vaginalis, and tunica vaginalis reflexa, were intimately adherent, and destroyed in three several places to allow of the protrusion of the funguses mentioned above. No traces of the original structure, either of the testis or epididymis, remained, both being converted into a diseased mass, a compound of almost every kind of disorganization. At the lower part, there was a soft, whitish, diffident matter, contained in two small cavities; in front, a reddish-brown substance; in the centre, a kind of nucleus, principally made up of that yellow tubercular matter, the result of chronic inflammation; and, at the posterior part, a white mass, hard in some places, half softened down in others, of which structure, also, the cord was composed.

If any one will be at the trouble of examining the cases of "sarcocoele" which

are reported and recorded, he will find that the majority of those which are really malignant, is made up of this anomalous structure, which fairly sets our classifiers of tumours at defiance. It may admit of dispute, whether, in such a condition of the parts, with a cord enlarged as high as the inner ring, and an unhealthy aspect, the patient was a fair subject for the operation. M. Roux thought he was, and for this reason, that, without it, his existence must soon be terminated by a loathsome malady; whereas, by its performance, he gains a few months of life, perhaps still more, and dies at last of a visceral disease, an incomparably preferable death. M. Roux believes that the immediate dangers of the operation are scarcely to be taken into the account, as they are few, and depend "on particular or local circumstances." Thus, he instances the case of a patient, who, after castration, was attacked with severe erysipelas, causing sloughs on the scrotum and penis, and attributes this "accident" to a particular "constitution" reigning in the atmosphere at the time, and inducing a great disposition to erysipelas throughout the town, after very simple operations. There is much truth in this remark, and it is well known, that occasionally in our London hospitals, there is this disposition to erysipelatous inflammation so strongly shown, that the surgeon's hands are almost tied. It has been observed in London, that this takes place after, or during, a long prevalence of Easterly winds, which might really be termed the English siroc, from their generally bad effects on the constitution of John Bull.

M. Roux makes some remarks on the operation itself which are worthy of notice. When he divides the cord, as in this case, high up, he makes the section of it gradually, taking up each vessel as it bleeds, because, at this height, the retraction is frequently very considerable when the cord is cut across at once. When the division is made below the outer ring, the retraction is of less consequence; but,

even here, it takes place to some extent, if the diseased testicle has been very heavy, and M. Roux has observed that the spermatic vessels retract much more than the sheath in which they are bound up. M. Roux protests strongly against including the whole cord in a single ligature, instead of taking up the vessels separately. Some surgeons declare that they never met with a bad accident from this practice, but Chopart relates the case of a man who died after this mode of operating, with acute inflammation and suppuration, extending to the loins, and tetanus followed it not long ago, in one of the Parisian hospitals. With regard to the glands which were enlarged in the groin of this patient, as they appeared stationary, and but little swollen, M. Roux was disposed to consider them as merely affected from sympathy with the irritation of the scrotum. If they had been circumscribed, and of great size, he would have extirpated them, just as enlarged glands in the axilla are extirpated with the cancerous mamma.—*Clinique*.

The sequel of the case is not detailed, but, with so palpably a malignant disease, the hopes of ultimate cure are slight indeed! Generally speaking, after amputation of the testicle for an affection of this kind, the lumbar glands become affected, and a tumour is noticed in the abdomen, which rapidly increases. A good instance of this occurred not long ago at St. George's Hospital.

CASE 2—Anomalous Disease of the Left Testicle.—Extirpation—Appearance of a Tumour in the Abdomen. W. Westbrook, a hale-looking countryman, was admitted into St. George's Hospital, Feb. 27th, with an oval tumour in the scrotum, about the size of a small melon. The tumour was hard and unyielding, except at the upper part, where there was a distinct projection, around which was a degree of softness and boggyiness, not exactly amounting to fluctuation. The testicle was heavy, not very painful on pressure, or, indeed, at any time; cord apparently enlarged above the outer ring; veins of the scrotum distended; a good deal of pain in the loins, particularly at night; costive bowels. The other testicle had not descended through the outer ring. Two years previously he had received some injury to the part, which, for a few

* We have seen one patient die of acute peritoneal inflammation after the operation, and there are several cases on record of tetanus supervening, even when the vessels have been separately tied.

days gave him considerable inconvenience. The swelling appeared two months before his admission, after a severe day's work, and was attended with a great deal of pain in the testicles. He applied to a surgeon, who bled and leeches him, with much relief, but on resuming his employment, the symptoms re-appeared, and from that time went on progressively increasing.

After a little purging, the patient was put under the influence of mercury, whilst, at the same time, leeches were frequently applied to the scrotum. These means were quite ineffectual, and the health was beginning to suffer considerably, when he was ordered decoctum sarsæ with spt. ammoniæ aromaticus, and on the 27th of March, extirpation was performed by Mr. Rose. On making a section of the tumour, it was found to be composed of medullary matter, portions of scirrhus, and serous cysts upon the surface, resembling what are commonly called hydatids, with here and there small specks of the yellow tubercular substance.

For the first 48 hours after the operation, there was a good deal of irritability, with some diffuse inflammation in the direction of the cord. Under the use of saline draughts, with antimony, these bad symptoms disappeared, his appearance improved, and the wound went on slowly healing. In the course of a short time, however, he again began to look miserably sallow, and to complain of flatulence, whilst, at the same time, there was discovered in the abdomen, a little above and to the left of the umbilicus, a tumour as large as a melon, and attended with a little pain on pressure. This tumour increased in size, in spite of the tincture of iodine, and another was also felt in the left iliac region, apparently a process or continuation of the former. On the 6th of May, the poor fellow was directed to try his native country air, with permission to return to the Hospital whenever he should think proper.

This case is not very dissimilar to M. Roux's. There was found, on dissection, the same mixture of morbid growths, scirrhus, medullary matter, yellow cheesy structure, serous cysts. The disease was not attended in this instance, with the pain and suffering which accompanied the former, but then it had not proceeded near so far, as there was no ulceration

of the scrotum, no fungus growth. We should remark, too, that the appearance of induration in the cord, in this case, before amputation, was deceptive, for it was found, during the operation, that the cord was pretty sound, though a *process* extended over it from the tumour, quite through the outer ring. The sudden appearance of so large a tumour in the abdomen, immediately after the operation, is but a bad augury for the future fate of the unfortunate patient; it serves to show how extremely rapid the progress of internal glandular disease is, when the external has been cut short.

In a case of fungus hæmatodes of the testicle, reported in the Medical Gazette, we find it stated, that in several cases of that disease, which Mr. Brodie has witnessed, the patients have died, after the operation, with true fungus hæmatodes of the lungs. Such persons are suddenly attacked with symptoms resembling violent inflammation of the pleura, and, to the astonishment of their medical attendants, are rapidly cut off. On dissection, the lungs are found affected with the above disease, and serum and lymph effused into the cavity of the chest.

It is well known, that the obscurity attending the diagnosis of many of the diseases of the testicle, is such, that it has been publicly recommended by Sir Astley Cooper, and many other surgeons, to plunge a lancet or trocar into the tumour, before having recourse to amputation, lest it should turn out to be merely a hydrocele or hæmatocele. They tell, indeed, a very pleasant but rather scandalous story of Sir Astley, at the Hôtel Dieu. The worthy Baronet, as every body knows, was deservedly a "lion" at the French Hospitals, and being in the operating theatre of the Hôtel Dieu, with a great concourse of students assembled, a patient was brought in with a tumour in the scrotum. Before removing it, M. Dupuytren handed the patient to Sir Astley, to ascertain that all was right. After a slight examination, Sir Astley handed the patient back to M. Dupuytren, with the assurance that all *was* right, when the sly Frenchman immediately punctured the tunica vaginalis, and evacuated, we cannot say how much, fluid! A buzz, of course, went round, at the expense of the "Grand Chirurgien

Anglais," which we need scarcely say, he bore with his accustomed good humour.

We are sure we shall be forgiven for taking this liberty with the reputation of one who can afford to lose so much, but we were led to relate the piece of scandal, from observing a case in which M. Dupuytren was deceived in the same way, though not by a brother surgeon.

Case 3. A man of 28 or 30 years of age, was admitted into the Hôtel Dieu, on the 27th June, with a considerable enlargement of the left testicle, which appeared fifteen years previously, after a blow received in mounting a horse. Since that, he had several times hurt the part, and increased the enlargement which proceeded very slowly. When admitted, the testicle was the size of a double fist, hard to the touch, and without fluctuation, except at its upper part. The scrotum covering it was tense, red, and inflamed; the tumour was not transparent; and there were violent lancinating pains in it, extending along the spermatic cords to the groins, and lumbar regions.

As the disease had existed so long, M. Dupuytren was not inclined to consider it either venereal or scrofulous, whilst the total want of transparency seemed to shew that it was not a simple hydrocele. Cases, however, occasionally occur, in which the hydrocele is complicated with a cartilaginous thickening of the tunica vaginalis, deceiving the surgeon and leading him to extirpate the testicle "to the great scandal of the assistants," and we should say, of himself. Accordingly, though firmly of opinion that the present tumour was malignant, M. Dupuytren determined on making an incision into the tunica vaginalis, and then, if neither water nor blood should flow, to proceed with the operation of castration. The incision was made, the tunica vaginalis found to be filled with fluid, and the membrane itself so thick and solid, as to resemble the half of a cocoa-nut! The wound was dressed with lint, granulations sprang from the interior of the scrotum, the remainder of the thickened tunica vaginalis came away, and thus the patient was spared a testicle, and the surgeon a very mortifying blunder.

ST. GEORGE'S HOSPITAL.

106. RUPTURE OF THE DIAPHRAGM AND VENA CAVA ASCENDENS.

A boy was taking care of a horse and gig, when the horse ran off and knocked him down, the wheel of the gig passing over his body, whilst at the same time, a lamp post fell also, but whether upon the boy could not be ascertained. He was lifted up and conveyed to a surgeon's in the neighbourhood, who immediately opened a vein in the arm, and contrived to abstract some six or seven ounces of blood. Being apparently little the better, he was carried to St. George's Hospital, and admitted, about 2 p. m. in a state of the most complete prostration, the whole body pale and cold, the pulse at the wrist to be felt, and that was all. In ten minutes after his arrival he expired.

On opening the chest, the left cavity of the pleura was filled with a quart, or more, of dark venous looking blood. The diaphragm on that side was rent across, and the spleen, literally torn into tatters, had been driven through the lacerated opening, and lay within the thorax. The stomach was still in the abdomen and free from injury, with the exception of the vasa brevia, which were broken up, and blood very extensively effused beneath its peritoneal coat. The splenic artery and vein were sound and still attached to a ragged portion of the spleen which remained in the abdomen. On lifting up the liver, a laceration of considerable size was discovered in the vena cava, where it passes through the tendinous opening of the diaphragm, and is joined by the hepatic veins.

The reporter remarks upon the case that, "at the instant the wheel passed across the belly, the diaphragm must have been powerfully drawn downwards in inspiration, and the abdominal viscera thus subjected to great compression, in consequence of which the spleen was driven through the rigid and contracted diaphragm. That the violence with which the spleen was forced into the thorax was excessive is abundantly evident from the complete *dash* in which it was, and indeed we do not believe it possible for the above injury to happen unless the diaphragm were in contraction at the time. The

rupture of the cava is more difficult to explain, for it lies not in a muscular but tendinous opening, and is therefore comparatively free from the effects of compression.

As for the bleeding which was practised, it is difficult to conceive that there could have been the slightest indication for it, unless it were upon the principle that a boy had been run over, and therefore *must* be bled."—*Gazette*.

A very similar case occurred at the Hospital La Charité.

A man, about 40 years of age, fell from a height of thirty feet, and died in seven hours from the occurrence of the accident. On dissection, a considerable quantity of blood was found in the cavity of the abdomen, the liver was torn in several places, the gall bladder also torn, empty, and collapsed. The stomach was not in the abdomen, but on opening the chest, it was found in the left cavity of the pleura, greatly distended, and filled with half-digested food. The lung was uninjured, but there was a very extensive laceration of the muscular portion of the diaphragm, through which the stomach had been forced into the thorax. Several ribs were broken on the left side.—*Clinique*.

This remarkable event, says M. De Jones, naturally leads us to conclude that the escape of ten out of twelve was owing to the influence of the mercury—a conclusion strengthened by the fact that the two who died could not be brought under mercurial ptialism. He observes that mercury was administered in the plague which desolated Malta in 1813; but it was given during the existence of the disease with the hope of curing it, and not as a prophylactic—which makes a great difference in the result. M. De Jones recommends mercurial frictions to be used in preference to the internal use of mercury, as a preventive, the former not being liable to objection on the score of irritating the stomach and bowels.

That fevers and other diseases have sometimes invaded those who were in a state of ptialism we know; but, at the same time, we have seen sufficient facts to convince us that mercurialization exerts a considerable prophylactic influence on the human constitution, when febrile causes, as contagion, &c are diffused through the atmosphere. As it is likely that our ships shall frequently come into contact with infected vessels, during the approaching operations in the Mediterranean, the above piece of information may be worthy of notice.

107. INFLUENCE OF MERCURIALIZATION ON THE PLAGUE.

M. MOREAU DE JONES has communicated the following piece of information to the Royal Academy of Sciences, of Paris. An Ionian boat having had intercourse with a Turkish vessel, the master of the boat became affected with plague, and in this state arrived at Cephalonia, where he and the boat's crew were put into the Lazaretto. The English surgeon of the Lazaret, conceiving that the crew of the boat had received the contagion, put them all, to the number of twelve, on an active course of mercury, internal as well as external. The whole of the boat's crew were successively attacked with plague, but with a remarkable difference in the degree of intensity. The master, and one of the crew who had not experienced any sensible effect from the mercury, died of the disease. The other ten became salivated, and had the disease in a mitigated form. They all recovered.

108. ON THE USE OF STRAMONIUM. By Drs. WENDT and ELLIOTSON.

In the 24th volume of Rust's Magazine, Professor Wendt has published some curious observations on the medicinal and physiological effects of stramonium, which we shall briefly notice. According to this writer, the action of stramonium is analogous to that of belladonna, excepting that it has much less influence on the circulation, and exerts a specific power over the genital organs. Thus, he informs us that, given in full doses, to a man in good health, it excites the venereal appetite; but if administered to an individual labouring under morbid excitement of the genital system, it calms that excitement. The medicine, he observes, is indicated in all cases of irritation, or even phlegmasia, especially where there is an attendant train of nervous symptoms. He recommends it in nympho-

mania, epilepsy from onanism or other excitement of the genital organs—inflammation of the spinal marrow—diaphragmitis—carditis, &c. first taking care to reduce inflammatory action to a proper extent by venesection and other modes of depletion. The preparation Professor W. recommends, is a tincture made by infusing two ounces of the dried seeds in eight ounces of Malaga wine, and one ounce of alcohol. The dose is five, ten, or twelve drops, every two or three hours, for an adult.

In a late number of our cotemporary, the *MEDICAL GAZETTE*, we observe some reports from St. Thomas' Hospital, where Dr. Elliotson has been exhibiting the extract of stramonium for the relief of periodical pains, or, in other words, neuralgic affections, which are often as distressing to the patient, as they are baffling to the practitioner.

The first case was that of a female who had excruciating pain of the left side of the face and neck, occurring every afternoon about five o'clock, and continuing four or five hours. The intervals were entirely free from pain. The health was otherwise pretty good. A grain of the extract of stramonium was given at 4 o'clock every day. By the third day the paroxysm was mitigated. The dose was increased one half. In ten or twelve days the paroxysms were stopped.

As neither bark nor arsenic was employed in this case, we cannot say whether they would not have been as effectual as the stramonium.

The second case was complicated with some pectoral and hepatic complaints, for which mercury was given, in conjunction with the stramonium. By these means the periodical pains and the other affections were removed, ptyalism having been induced.*

The third case was of a different character. The patient was also a man, aged 47, who was affected with severe gastrodynia thrice every day—at ten in the forenoon—five in the afternoon—and at midnight. His appetite was good, and he had no tenderness in the epigastrium. He was a painter by trade, and had had this complaint, more or less, for two years. The sulphate of quinine was here

employed fairly; and though it gave temporary relief, it completely failed in curing the disease. Having given some hints that he had had tape-worm two or three years previously, the oil of turpentine was exhibited in doses of an ounce, night and morning. By this remedy he was cured in a few days, although no tape-worm was ejected. We have no doubt that the gastrodynia, in this case, was caused by the emanations of lead—in fact, that it was a grade of colica pictorum.

We have recently met with a violent case of colica pictorum, produced by the superacetate of lead taken in the dose of only one grain, with an equal quantity of opium, for the space of about three weeks. The complaint for which this remedy had been given was seminal emissions, and was apparently cured, when the symptoms of colica pictorum supervened. They resisted all means till ptyalism was raised, when the bowels became free, and the pain about the umbilicus, attended with porraceous vomiting, ceased. We have often given the superacetate in larger quantities and for a longer period before, but never saw colica pictorum induced by that remedy.

109. MEMOIRE SUR LE RAMOLLISSEMENT DE L'UTERUS. MEMOIR ON MOLLESCENCE (MORBID SOFTENING) OF THE UTERUS. By S. G. LUROTH, M. D.

[HOSP. LA MATERNITE'.]

It is only of late years that MOLLESCENCE, or morbid softening of the living structures, was discovered to be one of the most important, and, unfortunately, one of the most common structural lesions to which the human frame is subject. The brain, the lungs, the spinal marrow, the nerves, the muscles, the bones, the heart, and other parts, have been found in this pathological condition, and have been the subjects of accurate investigation. The uterus is the organ to which we are now to direct our attention.

The MOLLESCENCE of the womb is more frequently partial than general. It more commonly occupies the internal surface, and the cervix—though occasionally it is found penetrating through the entire substance of the organ. The MOLLESCENCE presents several degrees, blending insensibly into each other. In the first degree, the parts are simply softened or very flaccid, generally with serous, or sero-sanguinous infiltration into the inter-

* Dr. Elliotson informs us that gargles of the solution of chlorate of soda very soon put an end to mercurial salivation in his practice.—Ed.

stices. An example of this kind was observed by our author in the *HOSPICE DE LA MATERNITE*, in the month of March, 1827. A young and strong female had been carried off by puerperal fever, a few days after delivery. On dissection, not only the uterus, which had a large empty bag, but all the other organs, especially those of a muscular structure, as the heart, were in a state of extreme flaccidity. The tissue of the uterus was infiltrated with serosity, and very lacerable. Internally it was lined with a dark coloured viscid coating, exhaling a putrid odour. The ovaria were softened, flaccid, and infiltrated. The heart was in a similar condition. There are not wanting examples of this kind in works on puerperal fever.

In the **SECOND DEGREE**, the structure of the uterus is still farther altered. It will scarcely bear handling, without reduction into a pulaceous mass. The following is an example, observed at the *HOSPICE DE LA MATERNITE*, under the care of Professor Deneux.

A female, aged 27 years, of good constitution, and previously healthy, was safely delivered of her second child, 4th April, 1827, after a labour of seven hours. She complained of a pain in her side the same day, and was bled, both generally and locally; but some symptoms of pulmonary affection continued till the 17th of the same month, when she complained, for the first time of burning heat in her throat. The night was passed in great agitation, and, on the following day, the tongue was observed to be swelled, and an erysipelatous eruption covered the neck and shoulders. As there were some signs of gastric derangement, an emetic was prescribed, and an oily purgative. On the 19th the patient complained of great general debility, but no local pain. Having exposed herself to cold by throwing off the bed-clothes, the erysipelas disappeared rather suddenly, and was succeeded by diarrhoea, urgent thirst, and cough. 22d. Cephalalgia was added 23rd and 24th. Showed symptoms of low fever; but without any pain or tenderness of the abdomen. She lingered till the 26th, when she expired, never having complained of pain in the abdomen or uterine region.

Dissection. The arachnoid was opaque—many red points in the brain when sliced—no effusion in the ventricles. There was some yellowish serum on the thoracic cavities—lungs sound—heart flaccid. There was some yellowish effusion

in the peritoneal cavity, but the peritoneum itself was healthy. The mucous membrane of the cæcum and colon was intensely inflamed—liver enlarged and softened—the uterus was so soft, that it would scarcely bear handling, especially its anterior parietes.

In two cases of puerperal fever, our author observed a similar mollescence of the uterus; and cases are quoted from Lippich and Nauman, showing the same condition.

In the third degree of uterine mollescence, the disorganization amounts to almost a liquefaction, or reduction of the viscus to an inorganic pulp. Generally, this state is only partial—life not continuing till the whole organ is so changed—especially in acute cases. For the most part, the stomach, heart, or other viscera, partake in these mollescences. The tissue thus softened, sometimes preserves its natural colour—at other times it is pale. The parietes of the uterus are more frequently in a state of atrophy than hypertrophy, when they are morbidly softened.

The **SYMPTOMS** of this uterine mollescence are very vague, and but little known—especially those attendant on the invasion of the disease. A sense of weight, or constraint in the pelvis—dull pain in the hypogastrium, augmented by pressure—uterine hæmorrhage—suppression of the lochia (if in the period of accouchement)—febrile exacerbations, &c. are the usual accompaniments of this disease; together with a remarkable prostration of the mental and physical powers, and a presentiment, on the part of the patient, that death will ensue. Our author thinks—and the conjecture is rational—that, if this disease be going on during utero-gestation, there will be slow and laborious parturition, with probability of a dead fœtus, uterine hæmorrhage, and other accidents attendant on bad labours. It is also not improbable, that mollescence of a portion of uterus may be very accessory to that dreadful occurrence, laceration of the organ. This last supposition, indeed, is nearly converted into a certainty, by the cases of ruptured uterus put upon record by various authors. The rupture of other organs also, as the heart and stomach, in cases of mollescence of these parietes, is favourable to this supposition.

The progress of mollescence of the uterus is sometimes acute, sometimes chronic. The duration, of course, is very various. It may continue for many years,

if the affection be partial, and if nothing occurs to hurry forward the disease. Without being able to say anything decisive as to its comparative frequency, our author thinks, that it is a malady by no means very rare. The proximate cause is doubtful—it is not always the same. The mollescence is sometimes a primitive affection—sometimes the effect of other diseases, as of inflammation. In the first instance, it may be owing to a kind of defective nutrition—in short, it may be a kind of atrophy of the organ, unaccompanied by any super-irritation or excitation. There is little doubt, however, that this mode of production is infinitely more rare than that which results from inflammatory action in the part, acute or chronic. Our author is also of opinion, that there is another cause for this mollescence of the uterus—and that is, a putrid or depraved state of the blood itself. Many cases which occurred to him at the *MATERNITÉ*, are in support of this doctrine; but, at present he declines entering farther on this path of investigation.

The *prognosis* is unfavourable—but more or less so, according to the degree of intensity, and extent of the disease. The *diagnosis* is very difficult, and must be gathered, if possible, from the few symptoms already described. In most cases, the disease is only recognized after death. This, however, was the case in many other diseases, now well known by living indications, but formerly undistinguishable, from want of investigation. The same observations will apply, no doubt, to the treatment. It must be purely *symptomatical*—that is, the actual phenomena present must be attended to, and combated, if practicable. In some cases the disease, when situated about the os, or cervix uteri, can be recognized by manual examination. It is then for us to determine, by the existing symptoms, whether it is of an inflammatory nature, or the effect of atrophy—and act accordingly.—**REPERTOIRE.**

110. DR. HOSACK ON REMOVAL OF THE TONSILS.

The removal of enlarged tonsils is an operation of frequent occurrence, and many contrivances have been invented for facilitating the extirpation, and preventing hæmorrhage. These contrivances we need not enumerate—they were all attended with pain and difficulty. The following is Dr. Hosack's plan, which has simplicity and celerity in its favour—and, we believe, is equally safe as those

which are much more harrassing to the patient, and embarrassing to the practitioner.

"Having had an opportunity, during my late residence in France, of frequently witnessing the successful removal of the tonsils by the knife, and having since my return performed that operation in six instances with the same favourable results, I avail myself of the opportunity afforded me through the medium of this journal to call the attention of the profession to the manner of conducting this operation, and the advantages it possesses over every other mode of removing the diseased tonsils—nothing more is necessary than to pass a hook through the body of the enlarged gland, and to raise it from its bed between the arches of the palate, then to pass a probe-pointed bistoury under its base, and with one stroke to sever it from its connexion: the hæmorrhage never exceeds two ounces, and is always to be arrested by a draught of cold water."

This operation is not of modern date, Celsus and Paulus Eginetus recommended this plan, which was objected to by Fabricius Hildanus as hazardous, and then the actual cautery came into use. The ligature succeeded, and is still, perhaps, the measure most usually employed. Dupuytren, Roux, Vacca, and many eminent surgeons on the Continent, with Physick, Hosack, and others, in America, prefer excision.

LA PITIE.

111. EPIDEMIC ERYSIPELAS—TREATMENT BY LEECHES AND BLISTERS.

Since the 24th of April last, erysipelas has been extremely prevalent in the Hospital of La Pitié, following the most trifling operations, as the application of a seton, or a leech-bite.

Case 1. A man, æt. 30, of a bilious temperament, had a seton in the nucha, for a very obstinate ophthalmia. An erysipelatous blush immediately appeared on the back of the neck, with hot and dry skin, quick pulse, tongue white in the centre, and red at the edges. Forty leeches were applied to the epigastrium and the seton taken out, but pain in the head supervened, and on the second of May the scalp was swollen, red, and painful, the erysipelas had attacked the face, the patient was delirious during the night, the tongue was very dry. *Thirty leeches to the occiput.*

* American Journal of the Medical Sciences.

May 3d. The erysipelas has spread over the whole face, the features are sunken, the pulse small, the tongue not red, but remarkably dry, the patient stupid and delirious. *Sinapisms to the legs—blisters to the thighs.* On the next day the delirium disappeared, the symptoms gradually subsided, and on the 10th of May the man was discharged cured.

The next case was similar in many respects to the preceding, but the termination was unfortunate.

Case 2 An old man, of 64, was admitted into the hospital for an enlargement of the parotid gland, which was treated at first by compression, and subsequently by the application of leeches. On the 25th of April, erysipelas appeared upon the cheek, the tongue was red and dry, the skin hot, the pulse rapid. Venesection in the arm, and the application of a considerable number of leeches to the epigastrium, were the means employed, but in spite of them delirium supervened, the pulse full, the tongue got dryer, the erysipelas spread over the face, and terminated in phlyctenæ, and on the 2d of May, seven days from the first appearance of the disease, the patient sank.

On dissection, the membranes of the brain were found inflamed, and the cerebrum itself of firmer consistence than it should be, and covered with drops of blood. The stomach and intestines were quite sound.

It appears that this patient had not only the disease, but himself to contend against, for he procured quantities of wine and food without the knowledge of the surgeons, and refused to submit to the regimen prescribed. Under these circumstances, it is no great wonder that depletion should have failed in arresting the disease.

In the succeeding cases, blisters were employed as well as leeches.

Case 3. A boy of 16, affected with the morbus coxarius, had a certain number of leeches applied to the hip, which were followed on the next day by erysipelas. The tongue was red and dry, the skin hot, the epigastrium tender to the touch. Thirty-five leeches were applied to the latter region, when the erysipelas attacked the thigh. A blister was applied to the inflamed part, but could not be got to rise, and of course had no effect. The erysipelas spread to the leg, and was assailed by another blister, which rose well, and routed the enemy at last.

The above was evidently a common case of erysipelas which would have been treated in this country by salines and low

living. We never had an opportunity of witnessing the employment of blistering in this disease, but we should conceive that so irritating an application to an inflamed part, must be extremely painful and moreover unnecessary in ordinary cases. That blisters have but little effect, if not a positively bad one, in severe cases, the following will prove.

Case 4. A woman of forty-five, whose constitution was worn out by the sufferings of a cancer, had the breast removed on the 25th of April. On the next day erysipelas appeared around the wound. Forty leeches were applied, and there being some symptoms of gastritis, twenty more were ordered to the epigastrium. The patient felt extremely weak; there was no thirst, but the skin, notwithstanding was burning hot; the tongue was dry, but not preternaturally red, and there was pain experienced in the left side of the chest. *Leeches to the thorax.* The erysipelas "travelled" to the right shoulder, and was attacked there by a blister, which seems to have proved of service; for on the 2d of May, we find that the disease had nearly disappeared. In the course of a short time the erysipelas returned, and took possession of the whole of the right side of the trunk, was treated by the application of a second blister, and on the 9th, had once more disappeared, leaving however some diarrhoea, and pain in the abdomen. *Fifteen leeches to the anus.*

10th. A most unfortunate change has taken place; there is great anæmia, the aspect cadaverous, the pulse "miserable," the tongue dry, but still not red, the mucous membrane of the mouth entirely discoloured. Ten leeches were applied to the umbilical region, but without avail, for on the morning of the 11th the patient sank.

Evidences of inflammation of the pleura on the left side and of the peritonitis were covered on dissection. There was some discolouration of the mucous membrane of the stomach, but no trace whatever of inflammation in the intestines.

It may admit of doubt whether or not the pleurisy and inflammation of the peritoneum which occurred in this poor woman, were aggravated by the blistering on the surface, for such a means would be not unlikely to repel a cutaneous inflammation, and throw it on a vital organ. We remember to have seen a case, where the breast was amputated for cancer in a young and apparently healthy woman, and where erysipelas attacked the wound. The patient died, and on dissection a considerable quantity of pus was found in that side of the chest, apparently shewing that

a considerable disposition exists for inflammation to extend from the walls of the thorax without, to the serous membrane which lines its cavity within. Facts of this kind are of use, as they tend to put the practitioner on his guard against employing any measure which may tend to favour this metastasis or disposition, whatever it may be, and throw the onus of the inflammation on the pleura or the lungs.

Baron Larrey is famous for the actual cautery. We remember when this worthy old surgeon was in London several years ago, he was shewn a patient with a syphilitic ulcer of the pharynx. The case was obstinate and the patient had been for some time under treatment, but immediately the Baron saw him he recommended the actual cautery as a certain cure, declaring that the man would never feel it. The hint was not acted on. At the *Hôpital de la Garde Royale*, they are in the habit of treating erysipelas by this rather disagreeable application, determined, we suppose, to "put out" one fire (St. Anthony's) by another.

Case 5. A young soldier, of lymphatic temperament, had a tumour of considerable size in the right axilla, in the centre of which fluctuation appeared, whilst a good deal of chronic inflammation remained around. Potassa fusa was applied to the fluctuating part, and the slough which formed, cut into. Erysipelas, however, supervened, and extended with great rapidity over a great portion of the thorax. The surface was lightly touched, at several points, with a cautery at a dull red heat. The erysipelas ceased to extend, and in a few days had completely disappeared.

Such treatment as the above might succeed in a robust young soldier, but we question whether it would not often be an overmatch for the enfeebled constitutions of many hospital patients. In common cases of erysipelas, "heroic" treatment of any kind, whether it be the actual cautery or twelve inch incisions, is not only unnecessary but cruelly severe, for salines and low living are sufficient. When the erysipelas is of a florid and phlegmonous hue, the pulse rapid and full, the patient of an inflammatory diathesis, incisions are often of the greatest service, as they tend to relieve the tension of the vessels, unload the part of blood, and give vent to matter, which forms in the subcutaneous cellular membrane, long before the integuments themselves give way.

Case 6. A young man, of florid aspect, was admitted lately into St. George's Hospital, with erysipelas of the right leg, ex-

tending to the knee, and following a "blister" on the foot, received in walking. He was ordered a poultice, cold lotion, and salines with antimony, but on the 4th day from his admission, he was slightly delirious, with quick pulse, and brown tongue. The erysipelas appeared upon the face, and the whole leg was of an uniformly scarlet tint, the cuticle being separated in extensive patches. Very free incisions were made by Mr. Brodie in different directions down to the subcutaneous cellular membrane, which was sloughy and infiltrated with pus.

The florid tint of the limb subsided, the bad symptoms went off, and in the course of a few days erysipelas had disappeared. Suppuration ensued in the cellular membrane, which was treated by poultices, &c. and in a short time the patient is to leave the hospital.

112. HOSPITAL REPORTS—NEW MEDICAL JOURNAL.

Just as this Number was closing, we received the prospectus of a new medical journal, entitled the "*MIDLAND MEDICAL and SURGICAL REPORTER*," to be dedicated chiefly to the publication of authentic hospital reports, collected from the provincial hospitals. The following extract will convey some idea of the objects and plan of this new candidate for public favour.

"We live in a busy age. In no former time, has so much intellectual activity been displayed. The cultivators of medical science have eminently distinguished themselves in the general pursuit of knowledge. The proof of this assertion will be found in the medical annals of the last thirty years. This advancement of our profession has been accompanied by a caution, and zeal, in conducting its periodical journals, that have no parallel in the history of our art. No circumstance has tended more to improve it in France, Germany, and Italy, than the manner in which the local history of Medicine has been given to the Public. There is scarcely a district of any extent in those countries without a periodical Medical Record. In this kingdom, however, great as have been the efforts thus made, they have almost exclusively been confined to the three Capitals, London, Edinburgh, and Dublin. The provinces have had no share in this pursuit, or at least only so far as the journals of the Capitals have derived support from the contributions of country correspondents. In reflecting on the state of medical science, and on the aid which it has

derived from the opportunities of observation afforded by congregating the sick in hospitals, it has often struck us with surprise, that so little should be known of the many interesting cases that must have occurred in provincial Hospitals. If, from the establishment of these institutions, faithful records of the valuable cases that have occurred in them had been handed down to us, our present limited knowledge of Morbid Anatomy, the only correct elucidator of Disease, would have been greatly extended. We know well that great difficulties must present themselves in effecting an object so desirable, as making public these instructive cases. The daily anxieties and fatigues to which those in general are subject, who have the professional care of these Institutions, are such as to afford little time for literary pursuits, and appear to present an almost insurmountable barrier to such an undertaking. It is not, however, to be denied, that by zeal and industry much may be effected, and the paramount importance of their object will induce the Editors of the Midland Reporter to endeavour, by every possible means, to make a faithful report of all matters of interest, occurring in the several Institutions to which they are attached. Neither will their means of affording information end here. They reside in the centre of a populous district, where facts of importance are doubtless not unfrequent occurrences, and they have made such arrangements as will ensure an early notice of them. It is also the intention of the Editors to commence each number of the Reporter by an Essay on some Medical or Surgical subject. To carry on this part of the undertaking, they must be, in some measure, dependent on their friends, and for this purpose they earnestly solicit their prompt and steady support.

"As the Reporter is to be strictly a record of facts, no Reviews will find a place in it; but every thing that can in the slightest degree tend to enrich the topography of the district, will be readily inserted, more especially observations Statistical, Botanical, Geological, and Meteorological.

The growing interest taken by the Profession in Medico-legal Science, will induce the Editors to use their best efforts to add to the hitherto scanty supply of facts in this important branch of knowledge. This object, they conceive, will be best attained, by giving a succinct account of the most essential particulars of all interesting cases of this nature, that may occur in the Judicial Courts within

their district. The intention, in short, of the Editors, will be to present such an account of all important Medical and Physical occurrences, that come under their observation, as will enable the Profession to ascertain the diseases of the neighbourhood and trace the connection, as far as the present imperfect state of the art will permit, with any peculiarity in the soil or climate, or in the habitations and engagements of the people.

"It is manifest, that if publications, on the above principles, be ably conducted in different districts, such a History of Endemic Disease will be made, as shall indicate the varying modifications of disease, in different situations, and at various periods. Thus will be obtained, by the combined exertions of many, and with little individual labour, an efficient means of investigating the genuine character of recurring epidemics, and disease in general.

"The Editors by no means confine their call for assistance to the Members of the Medical profession; many individuals, not of that Faculty, may eminently contribute to the great object they have in view; Gentlemen who reside much in the country, Men of general Science, and especially the Parochial Clergy, by the communication of facts in Natural History, local descriptions, the Flora of their districts, deviations from the ordinary course of nature, the prevalence of empiricism, &c. will materially assist their design.

"All Letters and Communications addressed (under cover) to the Editors, free of expense, at the Office of the Worcester Journal, will receive immediate attention. The first Number of the Reporter will be published on the first of August, price 2s. 6d. and the succeeding Numbers Quarterly. Gentlemen disposed to countenance the work, are requested to signify their intention to the publishers."

No possible doubt can be entertained, that the provincial hospitals afford an ample field for a quarterly journal of Hospital Reports; and we applaud the principle which stimulates our country brethren to the undertaking. We shall not fail to give every encouragement in our power to the work, and most sincerely do we wish it success. Every thing, however, will depend on the talent of those who are embarked in the enterprise, and the zeal of those who are to furnish the materials of the work. We would recommend the plan pursued in Paris—that of selecting an intelligent pupil, in each country hospital, to draw up the reports, making him responsible for their fidelity and correctness.

113. ANGINA PECTORIS.—PROGRESS OF PATHOLOGY.

At one of the late meetings of the College of Physicians, an interesting case of angina pectoris was read by Dr. Warren, of which we shall give a short account, and on which we shall take the liberty of making a few comments.

The patient was an elderly lady, who had enjoyed good health up to the accession of the present complaint, which terminated fatally in the course of ten or twelve weeks. The malady commenced with a sense of distressing pain under the superior portion of the sternum, which gradually increased, and extended, first to the shoulders, and afterwards down both arms to the wrists. The patient herself thought the pain was rheumatic; but its intensity soon became greatly increased, especially when she went up stairs, or took any considerable exercise. The attacks came on in paroxysms, consisting of acute and burning pain under the sternum, shooting thence to the spine—up along the neck—and down along the arms. Irregularity of breathing, great anxiety, and dread of instant death, attended these paroxysms.

When Dr. W. first saw the patient, she was recovering from a most violent attack; and was sitting in a chair, with her shoulders raised and “breathing only with the lower part of the thorax—not moving the upper ribs.” The pulse was about 100, soft and regular. Some relief was afforded by the abstraction of a small quantity of blood; but the paroxysms continued to recur, and one night, while turning herself in bed, she suddenly expired.

Dissection. No fluid in the cavities of the pleura—a small quantity in the pericardium—lungs sound—“heart free from disease.” The coronary arteries were rather thicker than natural, and presented some white spots on their inner surface, but they were not ossified. “At the highest point of the arch of the aorta was an ossification, about the size of a shilling, shelving towards the edge, which, at some points, was sharp and irregular. Across this ran a band of cartilage, dividing the ossification into two portions, and forming a kind of hinge, by which these moved on each other. The ossification was exactly accommodated, in shape, to the vaulted form of the aorta. A small ossified portion was also found at the bifurcation of the vessel.”

We have copied this note of the dissection from the *MEDICAL GAZETTE*, rather than trust to our memory, although we heard the paper read—because we know that our contemporary has access, like the

COURIER, to exclusive information from high quarters. The note is perfectly correct, though somewhat abridged. The following passage from the same source, will afford an idea of the pathological conclusions to which Dr. Warren came from this case.

“Dr. Warren is of opinion (as we understood) that when, in consequence of mental or bodily excitement, an additional quantity of blood was thrown into the aorta, so as to distend it, the shell of bone would, as it were, open on the cartilage as a hinge; but that, when the vessel contracted again, before it could return to its former curve, the sharp edge of the ossification would necessarily be pressed upon by its coats, which would thus be irritated—and hence, probably, the more violent paroxysms; while the situation of the morbid deposit, just at the point of the aorta most liable to be acted upon by the usual current of the blood, might account for the habitual aching.”

When the paper was read, we certainly felt considerable disappointment—not only as to the anatomical details, but as to the pathological conclusions. Dr. Warren, as one of the heads of the profession, must take every opportunity of prosecuting morbid anatomy, and is therefore intimately acquainted with every deviation from natural structure. We are consequently bound to believe that, not only the heart, but the nerves leading to the heart, were in a state of perfect integrity, in this case. Still, our own limited experience in *post mortem* investigations would lead us to doubt that a scale of ossification, the size of a shilling, in the arch of the aorta, could have produced such dreadful paroxysms, and ultimately death, notwithstanding the hinge which was observed in this scale, and the “sharp edge” of the ossification, which was supposed to irritate the coats of the artery. Conceiving that the inner coats of arteries were supplied with nerves from the *ganglionic* system, we did not imagine that *pain* could have been thus produced, when the root of the aorta was inordinately filled with blood, “in consequence of mental or bodily excitement.” In short, we cannot see any reasonable ground for attributing the dreadful paroxysms, with which this poor lady was affected, to the scale of ossification in the arch of the aorta. We look upon the case as a *NEURALGIA* of the heart and arteries, and conceive that the ossific deposit above-mentioned was a mere coincidence, and not a cause of the terrible symptoms which harassed the patient for ten weeks, and then terminated her life.

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I.
DISEASES PRODUCED BY MALARIA.

An Essay on the Remittent and Intermittent Diseases, including Marsh Fever, Neuralgia, Dysentery, Cholera, Tic Douloureux, Sciatica, Head-ach, Palsy, &c. &c. By JOHN MACCULLOCH, M.D. F.R.S.

[ART. II.]

DYSENTERY—CHOLERA—AGUE.

IN pursuance of our design to exhibit an extensive survey of our ingenious author's researches, we naturally turn from remittent fever to dysentery, cholera, and ague. This last malady is now very generally prevalent over England, though masked and disguised in a thousand different shapes. We, therefore, entreat a patient and very careful perusal of the following article, and we beg that each practitioner will look round him, with an unprejudiced eye, for proofs or refutations of the views here taken. This exercise of his intellects will be amply repaid in the end.

In respect to the first of these scourges of the human race, although Dr. Macculloch has but little personal experience, he has ample materials to draw upon in support of his doctrines, from the experience of others. Very few authors have written on dysentery, without tracing its cause, especially when epidemic or endemic, to terrestrial or aerial influence—aerial *imregnations* being as often blamed as atmospheric *vicissitudes*. The connexion of this disease with intermittent and remittent fevers has been remarked by all writers. The *nature* of this connexion, that is, the *proximate cause*, or condition of dysentery, is rather timidly, if not reluctantly touched on by Dr. M.

“To illustrate, slenderly, what is here meant, we have, in severe cases of the remittent fever, that local affection of the stomach which causes the black vomit, that analogous one of the liver which produces what are called bilious symptoms, affections of the head, and so forth, besides all the more rigidly local and partial diseases of which I have here treated at some length. It is not therefore difficult to comprehend, yet very generally and broadly, how such localization, or determination to the intestines, may produce dysentery; while this will vary as fever is conspicuously combined with it, or as the local affection is such as to supersede in a great degree the general one: while yet further, it is easy to imagine that if the affection in question should attach prefera-

bly to one or to another portion of the intestines, to the duodenum for example in one case and to the colon in another, (a fact very conceivable from their differences in character, structure, or sensibility,) all the varieties of dysentery as to the most obvious effects might be the result." Vol. I. p. 218.

This view, Dr. M. observes, becomes nearly identical with "that French theory, often differing from former ones only in its terms," which supposes dysentery to be an enteritis i.e. inflammation of the mucous membrane of the small or great intestines. The difficulty, as Dr. M. justly remarks, lies in accounting for the morbid miasm or malaria producing in one man a remittent, in a second, an intermittent, and in a third, dysentery. Our author conceives that there is little, if any, real distinction between diarrhœa and dysentery. He evidently believes that the late endemic at the Penitentiary was the product malaria, a doctrine, by the way, which is not impugned by the succeeding healthiness of the place. In all parts of the world, we see localities healthy for a series of years, and then suddenly, and without any ostensible cause, becoming completely pestilential. The East and West Indies, the Netherlands—in short, all parts of Europe furnish abundant examples. Dysentery, in this kingdom, is seldom severe or dangerous, and its treatment is pretty well understood. In tropical climates, where the disease rages on a larger scale, medical practitioners are also pretty much of one opinion as to the treatment.

In respect to cholera, we have always maintained that it is the product of some deleterious agent, emanating from the earth, and more or less diffused in the air. Dr. M. has come to the same conclusion. The following is one of the facts which have led to this conclusion.

"A frigate had cruised long on the coasts of India where this disease was raging on shore, retaining her health, however, and, as was believed, by rigidly avoiding any communication with, or even approach to the land; the captain's conduct in this respect having arisen from his experience of African fevers. Being on one occasion at anchor about three miles from the shore, the land wind came off to the vessel, and with such effect, that the usual smell attending Malaria, well known to the officers and men from their African experience, was immediately sensible. There was not at this time a sick man on board, while there had been no communication with the land for many weeks: and the alarm being immediately taken, the vessel was ordered to weigh for sea; while, as had been the constant practice, every man not wanted on deck, was ordered below, for the purpose of avoiding the effect of the Malaria thus blown off to sea in the manner which I have described in the essay on that subject. An accident having happened to the iron cable, the armourer was the first man employed, almost alone, on deck, in disengaging it; and though in perfect health when he came up, he was immediately seized with giddiness, was quickly rendered incapable of proceeding with his work, became insensible within three hours, and died of this cholera, which also seized on four of the crew before the vessel could get under weigh; the whole of them dying in the same manner." 222.

Dr. M. conjectures that the Indian cholera results from the ordinary miasma of fever in some peculiarly concentrated state, the effects bearing an analogy to what sometimes happens in the plague. The local affections of the stomach, bowels, and liver, are the most prominent features in this dire disease—we might therefore, Dr. M. thinks, consider cholera as a

"localized remittent of peculiar severity, and with two or three local affections at one time"—"a fever, in which minutes perform the destructive duty of hours, days, or even weeks; or in which, from its rapidity, there is scarcely an initial stage—as if the disorder commenced where it more usually terminates." With other conjectures, or plausible hypotheses respecting cholera, we shall not trouble our readers, at the present time, but proceed to the next subject.

INTERMITTENT FEVER.

We agree with the author, that there is hardly a fact better established in medicine, than that ague is produced by malaria. He thinks it is by no means proved that there is any other cause—at least of the original disease, or first attack, although various causes may have the power of re-exciting the disease. We shall not follow Dr. M. through a detail of the common phenomena or symptoms of ague:—they have, of late years, been presented pretty generally even to English practitioners. But we shall here notice some very interesting observations which our author has made on certain states of mind attendant on, or connected with intermittents, whether obvious or obscure in their forms. This state of mind is a peculiar irritability or despondency, more especially revealing itself in the cold stage, or incipient movements of the disease.

"It is in fact at times, the sole cold fit, or almost the only disease; though a watchful eye may always discover that it is connected with that collapse of features or change of expression which attends every cold fit of intermittent, and, very commonly, with that peculiar physiognomy, easier recognized than explained, which, to an observant eye, is always sufficient to indicate every disease, general or local, connected with intermittent, or arising from Malaria; an appearance which, when more strongly marked in the pallid hue of the face and the shrinking of the nose, ought to decide the question, even to the most negligent observer.

"Of its true nature and cause, be the moral results what they may, no doubt can be entertained, because of the suddenness of the attack, and of its periodical character; and it thus happens that in almost a second of time, and even in the midst of active good humour, or passive feelings of comfort or happiness, the fit of ill temper, or irritability, or despair, of a moral change under modes too various to detail, will occur, to last as long as the cold fit would have lasted had it been present; or lasting, when that is visible, just as long as the duration of the peculiar physiognomy which I have described. To be aware of this fact and this cause, on the part of the patient's circle, is to be furnished with reasons for making that charitable excuse which is seldom made, if ever, for what self-control might be supposed capable of preventing, and perhaps not much oftener for what is unavoidable; so rare is this species of charity: for the patient to be aware, himself, of the cause, is to furnish him with a guide for his own conduct in these circumstances, and a check over the display of those feelings; while it is also to offer him the consolation of knowing that it is his body rather than his mind which is diseased; that his perverted temper is not a moral and voluntary fault or failing; but as involuntary as it is capable of being remedied." 246.

Such a disorder of mind may be readily confounded with hypochondriacism. Such are the milder moral derangements in the milder chronic intermittents.

"But in severe cases of both, the united state of irritability and despair is apt to produce the far more serious effects of stimulating the patient, at least to think of suicide. This insane desire is a very common complaint of patients labouring under intermittent, and a very frequent source of great alarm and horror; while it occurs equally in patients who, before that, were cheerful, as well as youthful, in the female sex as in the male, in persons where, either from previous knowledge of their opinions and characters, or from observation in the absence of the fit, we are quite sure that it cannot depend on a wrong state of mind or of opinions, but is as rigidly a portion of the disease as it is found to be a periodical one." 248.

That such states of mind are very frequently produced by corporeal derangements we well know—and that these bodily affections are not seldom dependent on the impression or reception of malaria, we have strong reason to believe. How generally malaria deranges the functions of the viscera, and especially the liver, stomach, and other digestive organs, need not now be told; and that these derangements produce the most dreadful mental despondency, and lead often to suicide, are facts that are every day becoming more obvious to the attentive medical observer.

It is very important that these effects of intermittents should be known and understood both by patient and practitioner—since a knowledge of the real causes will be a great relief to the minds of those who, under such circumstances, are haunted for years with this species of phrensy or mental alienation. The desire for suicide is often exceedingly temporary, even when it is most overpowering; and if controlled with resolution, it soon passes away. To be aware, therefore, of the real nature of the adumbration may frequently tend to obviate its dire effects.

"There is another remark yet, which it may be worth while to make on this mental disease, whether or not it is really connected with intermittent in all cases. I have clearly ascertained it to be so, at least in some; or rather, every instance of the desire or attempt in question under this peculiar variation, which has come under my knowledge, has been a case under intermittent. As relates to the desire, the simple fact is, that the patient feels a species of antipathy against some peculiar part of his body, added to the general disordered feeling, or he longs to commit the act by wounding that particular point; while, whether his aberration amounts to the desire of suicide or not, this very point or place is the one eternally forcing itself on his imagination as an object of hatred and revenge. And so perfectly insane is this feeling, that I have been informed by more than one patient who has suffered from it, that there is no conviction at the same time that death would follow; or rather that the impression is as if the offending part could be exterminated or cured by the injury, and that the patient would then be well. And that suicide has actually been committed under this particular aberration, is well known from the more curious records of physis; while I need not do more than suggest one peculiar part of the body which has been often the offending and selected point; the act having been sometimes also, but not always, followed by death." 251.

Dr. M., we have no doubt, alludes to those cases of monomania, where men have severed the genital organs, from some momentary impulse of local antipathy or feeling which can only be known to the individual at the time.

"The philosophy of this, as far as my opportunities of observation have gone, and on the indicated ground of explanation, for these cases at least, is, that while the irritable, or jointly despairing and raging or angry state of this chronic fever is present,

there is also a particular part of the body affected by an uneasy but undefinable sensation, such that the mind constantly reverts to it as a source of suffering. And if this local affection is not a neuralgia, or a condition of absolute pain, yet it is a local and nervous one of an analogous nature, always returning to that one point under the same stage of the fever or delirium. When, as is not unusual, it is seated in the head, it is even distinguishable by a dull pain, or a confusion, or a sense of 'buzzing' (for thus it is described by patients,) in one fixed place, indicating pretty clearly its real nature: while, in that particular case, I have the assurance of such patients, that the suicidal desire is exclusively directed to that individual spot, and that while a pistol would be the only acceptable mode, there would also be no satisfaction unless that were directed to this actual and only point. But I will cease, and allow physicians to exert on this solution of no easy question, the ingenuity which has not hitherto succeeded in producing an intelligible explanation." 253.

Our author inclines to the opinion of STRACK, that an intermittent fever may consist of only one paroxysm, finding its natural termination after one attack—"and consequently that the fever called ephemera is, in reality, often a single intermittent." Strack observes, that this is the disease which terminates in an eruption on the lips. If Hippocrates is any authority on such a nice point, he may be thrown into the scale with Strack and our present author.

It was, and perhaps still is an opinion, (medical as well as popular) that agues, at least those of spring, are salutary. This notion was entertained by Boerhave, and by many great names in our own country! Dr. M. thinks it probable that this idea arose from the fact that ague sometimes removes a chronic disease—or from another fact, that men not unfrequently become fat after a sharp attack of intermittent fever, especially in Flanders. It is curious that this obesity is not prevented by enlarged spleens and other visceral derangements, in many instances:—nay, even the daily paroxysms of ague, if not very violent, are sometimes compatible with an increase of corpulency. In whatever way we may account for this, the fact proves that ague, under ordinary circumstances, is not very prejudicial to the constitution, unless it be protracted or severe. But, on the other hand, we often see rapid emaciation, great loss of muscular power, and visceral derangement superinduced on intermittent fever, in all, but especially in hot and unhealthy climates.

ANOMALOUS, OBSCURE, AND SIMULATING INTERMITTENTS.

Hitherto our author forbore to notice those epidemics, where very marked local inflammations of particular organs were such prominent features as to render the mere fever of comparatively little moment. He reserved them for this place, in order that he might the better illustrate the anomalous, localized, or simulating intermittents, a knowledge of which he considers as of paramount importance. These local inflammations affect almost every structure in the body, from the muscles and ligaments to the

most vital organs—simulating or nearly equalling genuine idiopathic inflammations of these several parts, and introducing great diversity of opinion among practitioners as to the nature of the disease and the proper mode of treatment. If these phlegmasiæ occur, and all must acknowledge that they do occur, in marsh or continuous fevers, so it is reasonable to believe that they are attendants on intermittents, which are only kinds of the same fever, and thus they may be productive of great error or delusion.

“The inflammatory, or local affections, be they what they may, may be slender and truly supplementary; but they may also prevail so far above the fever, as in remittent, that they may appear to be a distinct disease, or the superior one; while if, further, the local affection should be permanent or continuous, when the fever has its intermissions, and perhaps long ones, as in quartan, and while, still further, that fever may not be very conspicuous compared to the local symptoms, it is easy to see that erroneous views and erroneous practice may follow.” 280.

Dr. M. apologises for dedicating so large a space in his work to an investigation of the chronic forms of anomalous and simulating intermittents; but we think he need not fear censure on this account, for we verily believe this chapter to be one of the most original and valuable in the whole work. We regret indeed, that the tedious tautological *manner* in which he treats his subject, will deter most of the reading practitioners (not a very large proportion) of the day, from profiting by his researches:—since few of them will be at the pains of reading a passage twice, if they do not fully comprehend it at the first glance.

The first subject of investigation is the apoplectic state which sometimes commences the attack of intermittent as well as remittent.

“This state is not limited, either to the first attack or to the acuter forms of these fevers, although in Italy that appears to be the most common mode of its occurrence; as I have seen, in this country, a perfect apoplexy, to the eye, in all its characters, sufficient to deceive both the attending practitioner and the friends, lasting for eight hours, and occurring in a chronic tertian of many years standing, as a substitute for the cold fit.” 287.

The danger that may result in practice, from an error here, is obvious enough. Venesection, to the amount generally employed on such occasions, might occasion palsy or even death—at all events, it would aggravate the symptoms. Dr. M. has seen local and limited paralytic affections produced by this practice, in many instances, “and in more than one, a perfect and incurable hemiplegia.” We doubt whether Dr. M. could positively determine that a hemiplegia was thus produced. In common hemiplegia, permanent hemiplegia, there is generally an effused clot of blood; and if so, how can it be positively ascertained whether or not there is extravasation in consequence of venesection unnecessarily employed, without the aid of dissection? By this we do not mean to impugn the doctrine of simulated apoplexy. At page 455 of the 8th volume of this series, we have stated a very remarkable instance in our practice, and we

could adduce several others; but we think Dr. M. has carried doctrine too far in the above cases of hemiplegia. We could more easily conceive that death would ensue from copious venesection in simulated apoplexy than that permanent hemiplegia should ensue.

"A modified condition of this nature, is the lethargic or comatose state, which occurs in the chronic intermittents as well as in the remittent of that character, and which also sometimes ushers in the first attack of an intermittent, in the same manner as the more perfect apoplexy does. It is incumbent on the practitioner to investigate this symptom or condition where it occurs, much more accurately than it is the custom to do; while it is abundantly easy to discover whether it belongs to this disease or not. To view it as an independent disorder, and as arising, according to the popular and fashionable error, from what is called a flow of blood to the head, is a most unpardonable mistake, from its leading similarly to injurious practice; to bloodletting and to cupping: the consequences of which also are, sometimes, paralytic affections, at others, slight epileptic ones, or even more decided fits of that disease; in others again, a modified fatuity, or a diminution of the intellectual powers, or a condition little short of absolute idiotism: and, even, in the least evil event, a long train of debility and nervous symptoms, with the further frequent consequence, as in the former case, of rendering chronic a disease which would otherwise have terminated by itself, or of protracting much longer and more severely, a disorder already chronic. It is one of the cases, and one of the modes of practice, yet but one out of many, which so often causes medical interference to aggravate the diseases of this nature. I shall only further remark, that this error is most generally committed, as I have seen in numerous instances, and as perhaps might have been anticipated, when the patient is corpulent, or of a certain form, or advanced in life, or when suspected of indulgence in eating and drinking: when it will be fortunate if he escapes bloodletting or cupping, to be simply deprived of the use of wine, or restricted in diet; though even practice of this moderate nature is not always without its bad effects." 289.

Paralytic affections, as occurring in these masked intermittents, are next adverted to by Dr. M. Dr. M. has not found any practitioners "who seem to know that palsy is the frequent produce of malaria, or the substitute for intermittent fever, or a symptom in that disorder." We believe that such cases are not generally known or suspected by British practitioners; but it has long been known that local paralysis, and that too of a very indomitable nature, is a common effect of what is called in hot climates, especially India, "*a stroke of the land-wind*." Thus a soldier or sailor falls asleep, with some part of the body exposed to the night or land-breeze charged with miasmata from a jungly or marshy district;—and he awakes with the part completely paralytic, never more perhaps to be capable of sense or motion. This is a fact of frequent occurrence, and is strongly confirmative of our author's views.

"Apparently as a substitute for, or modification of, apoplexy or coma, however obscure the exact cause may be in either case, the first attack of an intermittent is sometimes a numbness, or a more perfect paralysis, varying in its extent as well as its severity, so as to effect only a few muscles, in different parts, or else to produce an absolute hemiplegia; which, however, may also be slight as well as complete, or may consist in a numbness or loss of feeling to that extent, without depriving the patient of his command over the muscles. Should the truth of such a cause for palsy be denied on the ground that we cannot explain its action, it must be recollected that it is no more a mystery than the production of apoplexy in the same cases; while the possibility is confirmed by the numerous instances of the same nature which occur, limited to single, and sometimes very small nerves, and either

original, or succeeding to painful conditions of those. Every thing indeed tends to show, that if the diseases produced by Malaria are not, purely, and all, mere affections of the nervous system, the principal action of this poison is on that system, and the greater proportion of the disorders which are caused by it, disorders of the nerves. Whether the paraplegia so often occurring from exposure to cold, and especially among soldiers in bivouacs, is sometimes, or ever, a disorder of this nature, is a question that I cannot answer from such evidence as I have been able to procure, however this may be suspected in some cases." 292.

If these paralytic affections sometimes usher in a new intermittent disease, being like coma, a substitute for the cold stage, so has our author seen them, occur in the chronic form, and both under circumstances that could admit of no doubt. Thus, in a situation exposed to malaria, and never free from its diseases, in one or other form, a whole family, with the exception of two members, had ague, while these two were attacked with a paralytic affection suddenly—one in the leg and thigh—the other in the arm. In both these individuals, the paralytic affections as suddenly disappeared on the evolution of a regular quotidian ague. The practical error here is the same as in the simulated apoplexy—"the imagining a *flow of blood to the head*—and palsy to be treated by bleeding and evacuations." The result, our author observes, is, in severe attacks, to render that permanent which would only have been temporary, had the doctor not interfered, or had proper means been employed! Of such cases, he says he could state a great number from his own observation. The previous history of the patient, his diseases, his residence, and his treatment, left no doubt in his mind. Dr. M. mentions a few cases from the practice of others, stating the mere facts, and leaving it for the reader to draw his own conclusions.

Two sisters in one family, about the age of 30, were strongly marked with that complexion and physiognomy attendant on splenic diseases, and were subject to those strange and anomalous symptoms which spring from chronic intermittents. They had spent a large portion of their time in one of the most pernicious districts of England, and the frequent occurrence of "spasms" led to bleeding in both cases. This was followed by more nervous symptoms, and led, of course, to more bleeding and purging. "The result, in one of these patients, was hemiplegia, and in the other paraplegia and further bleeding being resorted to for these disorders, both of them died."

The other case was that of an officer, who is supposed to have had an intermittent fever at some previous epoch. "An inexplicable palsy of one limb was here the first occurrence, and, in a man of a constitution and time of life when the usual vulgar cause could not be suspected. Blood-letting was followed by palsy of the other leg; and, on repeating it successively, both arms, one after the other, became similarly affected, so that the patient at length became and remained almost an immoveable carcase." The final issue of this melancholy case is not yet known. Cases are quoted

from Keratry and Etmulla bearing upon this point, and then the following is introduced, not very flattering to the "healing art."

"In this example, an officer, a young man, who had suffered from the remittent fever in Spain, was suddenly seized on an English parade with a fit, or what is commonly called such, which was considered as apoplexy; being in reality a return of his intermittent. Being placed under the usual discipline, he was rendered partially paralytic, and at length, under two years of the general routine, became the mere shadow of a man, while previously most robust; losing also, with his strength, the better part of his intellect. Determined at length to join his regiment in the West Indies, he embarked in a transport, where, from there being no surgeon, all medical practices were suspended; from which moment he began to recover, and concluding just what I have here concluded, was in a few months restored to perfect health." 298.

This consequence of the malarious impression (paralysis) is generally admitted by those continental writers who have practised in unhealthy localities, but they have overlooked the share which bleeding and other evacuations may have had in the production or aggravation of the paralytic affection. Dr. M. assures us that his own experience on this point is wide and ample—and that it is far too precise to permit him to surrender his own judgment to the authority of others.

"Of partial palsies in the face, and of more general ones in the legs and in the arms, traced by the patients to cold, and, under my own views, appertaining to intermittent, I have known many instances rendered complete or incurable by blood-letting, when, from my own experience in similar ones, I have reason to believe that they would have passed away had the physician not interfered." 300.

Dr. M. takes occasion here to criticise pretty sharply some recent writers on palsy, for not even noticing, as one of its causes, the impression of malaria, or its consequence intermittent.

"And when I recur to a long series of observation, much more on the practice of others, of course, than in my own, I find such a mass of cases where it was to be often proved, very often suspected, that the paralytic affections arose from this very cause, that I am compelled to conclude that, in the first place, the cause in question is a very general cause of palsy, and, secondly, that the error of practice arising out of a wrong theory and the common one, is the source of the far greater number of incurable palsies daily met with in society; the increase of which also has been notoriously great for some time past, while it bids fair to proceed in augmentation, as the diseases of Malaria, from whatever cause arising, are themselves increasing, and as the improper practice to which I have alluded becomes also daily more prevalent." 302.

Besides these more sudden and palpable paralytic affections attendant on masked or open ague, there are others of a more gradual nature, which it is necessary to point out. These, perhaps, will be best understood by the statement of a case. This was an instance of a relapsing or chronic quotidian, where no previous local affection had existed during the relapses in question, which generally lasted six or eight weeks, there came on gradually a feeling of weakness in one leg and foot, which increased so much during the disorder, that the patient could hardly put that foot to the ground.

"And although there was no pain or neuralgia, it was easy to trace with the finger the course of the fibular nerve from the middle of the leg into the foot; as the slightest passage of the finger over it was attended by the well known tingling sensation.

produced by a pressed nerve; while a stronger pressure where it is nearest the surface, gave the equally well known shock produced by striking the elbow, in another superficial nerve. It was obvious that the muscles chiefly affected in this case, were those to which this nerve principally belonged, and therefore that it was in a diseased state; that derangement appearing to consist in a diminution of its energy or power, added to an increased or morbid sensibility." 303.

The analogy of this to the proper neuralgia is, Dr. M. thinks, evident; and it must, in his mind, be considered as a modified degree of this malady. In subsequent relapses, the affection of the nerve was exasperated, and, ultimately, the ulnar nerve of each arm became similarly affected, with the same inability to extend the arms, without immediately feeling the tingling, as of a compressed nerve, along the whole course, from the arm-pit to the fingers. Dr. M. thinks that this affection of the nerve, whatever its true nature, must have been strictly local, or what might be termed anatomical—that is, appreciable by dissection. In the case now related, the nerves of the arms recovered, but those of the legs remained disordered for many years afterwards.

Dr. M. proceeds to quote cases from other writers, which, whether designed or not, support the doctrine which he is advocating respecting the connexion between palsy and intermittent. Thus Sauvages quotes a case from Chaptal, under the very term *tertiana hemiplegica*, which Dr. M. thinks might have opened his eyes to the connexion in question; but it did not. In another case quoted by the same learned nosologist, the paralytic affection came on every day, and disappeared with the accession of the proper quotidian.

"Palsy in the form of paraplegia, of a periodical and quotidian intermitting character, is also described by Torti, from Chaptal. Where the same writer, from the same authority, quotes a similarly periodical hemiplegia absolutely perfect, while it was quotidian and intermitting, lasting also for ten hours, he remarks that it was always increased by purging as well as by bloodletting, and that on changing the practice it was cured by bark in nine days. This particular case is of value, as a warning to practitioners; and, from the nature of the attending and preceding symptoms, perhaps of somewhat more value than common."

A case from Morgagni is still more remarkable. In this, one side was permanently paralytic, while the other was attacked every evening with a palsy, which disappeared in the morning—the patient, after seven or eight such fits, dying of peripneumony. Various irregular cases of this kind, where the paralysis was attended with convulsions, are noted by the same author. Neither Morgagni, Sauvages, nor any of the writers on palsy, however, appear to have suspected a connexion between intermittent and that disease. The connexion of apoplexy with intermittent has been largely noticed by Ramazini, who describes the apoplexy as occurring at all periods of the disease, as well as at its commencement. This connexion was also known to Morton, and its nature must have been appreciated, when he prescribes bark for the cure of the apoplexy, as well as the ague. Theon de la Chaume

describes an epidemic tertian, accompanied by apoplexy, as prevailing at Ajaccio, in two different years, 1773-8. The same has been often seen in Bresse, the most pestiferous part of the Lyonnais.

"It is a noted fact, that it is the effect of chronic or habitual intermittents to injure or destroy the intellectual faculties, as I had occasion to point out already when treating of remittents. This is notorious in the countries where these disorders prevail, and very remarkably, as I formerly said, in the Maremma of Toscana, where even absolute idiotism from this cause is common; the fact being marked, even to cursory travellers, by that apathy, listlessness, or indolence of mind, gradually approaching to fatuity, which I formerly described. If the cause be obscure, it cannot well be more obscure than every thing else which belongs to the action of Malaria; while the fact of the universal influence of this poison on the nervous system, local as well as general, leaves no difficulty, at least, in believing that it may produce such effects on the mind." 322.

But ague, for a long period of its existence, only affects the mind with irritability, or increased sensibility, as evinced by peevishness, exaggerated views of evil, increased sensibility to bodily suffering—to say nothing of nervous sensations beyond number. In process of time, however, a train of opposite effects come to prevail. The mind becomes, as it were, torpid, as evinced by listlessness, and submission to present evils, with scarcely a wish to escape them. This is a striking feature in the inhabitants of pestiferous countries. Dr. M. relates some curious instances where, in people who had laboured under this disease, the organs of sense lost their aptitude for pleasurable sensations, "their complaints being, that beautiful objects, such as pictures, natural scenery, &c. which, before that, or when in health, had been most pleasurable or engaging, seemed to make no impression at all on the sense."

"From such patients I have received also the same complaints and statements, with respect to the other usual causes of simple pleasurable feelings; and very particularly from those who, as musicians, were accustomed to delight in music, not less from science than feeling; those being, that they seemed to suffer under a positive insensibility as to what used to be a source of the most refined delight, although labouring under no affection of the temper, nor any of those sensations commonly called hypochondriacal. And thus have others complained that the most grateful odours had ceased to give pleasure, that the scent of a rose was not only powerless, but produced absolute pain by reminding them of what it once was; while every attempt to revive the former associations connected with this and other similar objects of delight, was unavailing." 325.

This *mutatis mutandis*, Dr. M. thinks, is precisely the progress in those cases where single nerves are affected, instead of the whole cerebral system. "In the neuralgia, the first action of the cause is an increase of sensibility, reaching to the highest imaginable degree of pain;" but the progress of this is to palsy—"or the excessive sensibility is succeeded by a diminished one," as if the sensibility were exhausted by the previous over-excitement.

After many ingenious and interesting observations on *periodical* mania, vomiting, hysteria, palpitation, and other irregular modes or forms of intermittent, our author comes to the occasional connexion of rheumatism with malarious diseases. Dr. M. without attempting to unravel the difficult

pathology of this disease, trusts that he will be able to prove that there are cases which belong to intermittent—"cases bearing an analogy to certain modes of neuralgia, and possibly differing from it by the affections being seated in the numerous and minute ramifications of a nerve, instead of attacking a trunk, or a leading branch."

"The most simple case of all, while it is one that ought never to be mistaken, is that where a rheumatic pain in some particular muscle is strictly periodical, returning and ceasing in regular paroxysms. In such cases, the part affected may sometimes be exceedingly limited, occupying only a few fibres of a muscle, though, even then, the pain is often severe; while in others, the extent may be very considerable. Thus even the whole body may suffer under it; or rather there may be so many different muscles affected, in some place or other, that scarcely any movement can be made in which some one or more of the disordered portions is not brought into action; conveying thus, to the patient, the feelings as of an universal rheumatism." 369.

Such a periodical recurrence, he observes, might satisfy a practitioner respecting the true nature of the disease; but it will often be attended with other symptoms, explanatory of its cause. Thus, it will be found to occur in persons who have been previously affected by intermittents, forming in itself a period of relapse, and a substitute for the more common modes of chronic disease. In other cases, the rheumatic pains will alternate with some of the other marked symptoms belonging to this disease:—or it may cease on the appearance of the common symptoms of intermittent.

Dr. M. tells us that there is a certain *physiognomy of the cold stage*, however wanting the actual feeling of cold may be, which is never absent at some period or other of this, and of all other malarious diseases, and which has, on endless occasions, enabled him to pronounce, from the first sight of the patient, on the nature of the disorder to which he has been summoned, with the assurance of its mysterious nature by the medical attendant. The power of distinguishing this physiognomy, however, requires the *TACTUS ERUDITUS* of the experienced practitioner.

The kind of rheumatism here alluded to, as connected with intermittent, will, of course, be generally of the chronic kind, and our author does not attempt to say what proportion they bear to the common rheumatism, dependent on other causes; but he thinks it probable that they form a considerable proportion of what pass under the name of chronic rheumatism.

"The more serious question remains; whether that which is esteemed acute rheumatism, a disorder too well defined and too familiar to require description here, may be a mode of intermittent. I do not mean to suggest at present, that every acute rheumatism is a disorder belonging to this class of diseases, or that, as in the chronic variety, there are not cases which are independent disorders, or affections, generically different, although it seems to me, that even this is a question far from decided the other way. The question at present is, whether there are not acute rheumatisms of the most regular form, which are truly modes of the quotidian intermittent, or of the remittent, possibly, originating in the same causes: and if it shall be decided that this is the fact, and that there is also an acute rheumatism ge-

nerically different, then we shall probably be able to explain the causes of the contests so long maintained respecting the use of bark in this disease.

"The facts which would seem to prove this opinion are chiefly these. There is a periodical exacerbation, if there is not always an absolute remission of the pains; and the duration of the disease is very analogous to that of a remittent, or of one period of an intermittent. The causes correspond, if they are not identical, while the remedy is often the same; since after all that has been disputed, there is no doubt that many cases are cured by bark, and that blood-letting is not only often ineffectual, but pernicious; its action altogether, being, in fact, very similar to that which it exerts on remitting and severe intermitting fevers." 375.

Thus, while in acute rheumatism, the misapplication or abuse of blood-letting often produces the chronic disease; so, a similar practice frequently induces the chronic state of intermittent—or converts an acute and terminable case into a durable one.

"It is not impossible also that the termination of the pains of acute rheumatism, succeeded by affection of the brain, and so often producing death, may be an analogy to what happens in other cases of intermittent diseases, where one local affection is exchanged for another, or disappears, to be replaced by an augmentation of the general fever." 376.

We are so far outstripping our limits that we must pass over our author's investigation of those cases of pleuritic and catarrhal affections, angina, hepatitis, gastric and splenic disorders, ophthalmia, &c. which occasionally assume a remittent form, and depend on a malarious cause. Every man must have repeatedly seen rheumatism of the intercostal muscles mistaken for pleurisy, and venesection injuriously, or at least injudiciously resorted to for its cure.

"If I have seen constitutions utterly ruined by a perseverance in this wrong practice, if I have seen patients condemned to believe themselves labouring under consumption in these cases, with all the expensive and vexatious consequences that follow such an error, there are doubtless many physicians to whom the same facts have occurred." 380.

Yet it is by no means difficult to distinguish between the internal and external complaint, even without the aid of percussion or auscultation. The following case is interesting, and we shall introduce it here.

"The patient was a young man in the higher rank of life, and the pain in the side was termed pleurisy, though no cough was present, and very little fever; so little, that not even confinement to bed was necessary. Blood-letting was resorted to, very actively, and was followed by increase of the pains; and, not to prolong a tedious history, these pains continued or returned occasionally, during nearly a whole year, while, during all that time, this remedy was repeated, often, many times in a week. If it was plain that this, by merely negative reasoning, must have been a rheumatic disorder, there was even much plainer evidence, in the periodical returns of the pain, after some weeks, that it was also the intermitting disease; while the physiognomy and appearance marked, once in every day, a decided cold stage. Still further, after about five months, there came on a pain in the shin-bone of one leg, regularly periodical, and lasting five hours; during which, the rheumatic pains among the ribs diminished or ceased, yet without leading the physicians to a correct judgment of this case, as it ought to have done; being a true neuralgia, interchanging partially with the original intermitting rheumatism." 382.

This case was considered to be a wonderful and mysterious one, and it

was proposed to make an incision through the periosteum, on a supposition that the bone was diseased. The patient's health was greatly reduced, and he did not recover strength for many years, when the disease terminated in a regular ague that has harrassed him ever since in a chronic form!

Among other intermittent rheumatisms, Dr. M. notices lumbago, which is, at least sometimes, a modification of the class now under discussion. One case is mentioned where, what was called a regular lumbago, and treated as such, "was suddenly and spontaneously removed, and immediately succeeded by the common neuralgia of the face." A similar case is recorded by Dr. Pearson. Dr. M. considers those pains situated in non-muscular parts, as improperly denominated rheumatism. They belong to the neuralgiæ, as those of the face and head.

"There is something singularly periodical in the attacks of a catarrh which often comes on in summer, and, as it would appear, most commonly from exposure, not simply to heat it would generally seem, but to heat where vegetation is present. This well-known disorder is produced by hot-houses or green-houses; and, in the public estimation, it is particularly caused by hay-fields. Hence the term hay-fever, lately become fashionable." 394.

Dr. M. has not much experience of this disorder, but he knows that it is one which is aggravated by the remedies which aggravate intermittents—namely, blood-letting and other evacuations. Dr. Bostock, who appears to have suffered from this complaint in person, has given a full account of it.

We must pass over a great many complaints of a periodical character, and which are not improperly classed among those dependent on a malarious origin, in order that we may dedicate a few pages to therapeutics.

TREATMENT OF INTERMITTENTS.

Dr. M. does not pretend, of course, to offer any new cure for this class of complaints; but he has dedicated a large space to comments on those modes of treatment which have been employed by others. He observes, that the remedies which will cure a recent intermittent, will be much less efficacious in one of long duration or relapse—but he does not conceive that any distinction is necessary as to the types of intermittent maladies—"since, in all of these, the remedies are the same," requiring only such modifications as the obvious circumstances of the case may indicate.

The simplest remedies are those which act on or through the mind, and—"their number is far greater than I choose here to record." Their action is undoubted—but they are best suited to new attacks of new diseases. There is no evidence of their efficacy in remittents, and it is curious that remedies of this class have been more successful in stopping tertian than quotidian agues. Without *faith* in their power, they are nugatory—

and this explains the rationale of their operation in most cases, in conjunction with disgust, fear, and other strong mental impressions. Under this head (Dr. M. thinks) must be classed "a vast catalogue of internal medicines of the most discordant properties or of no properties at all." He is of opinion that bark itself sometimes acts in this way—namely, by *confidence*.—Spiders' webs may act by disgust or horror, and so on.

The next class of remedies includes those which make a powerful impression on the system, and especially on the stomach, immediately before or soon after the commencement of the fit—by which the paroxysm is prevented or abridged. Alcohol, opium spices, are the basis of this class. Those medicines which we term tonic, as bark and arsenic, are next noticed by our author. He cannot conceive why they should have the term *tonic* applied to them, "so unphilosophically lax are the ideas attached to that term." After some general observations on the management of the three stages of the paroxysms, Dr. M. comes to make some comments on the administration of particular remedies, beginning with the bark. Between the foreign practice of giving as large a quantity of bark as can be taken, within one, two, or more intervals, and then ceasing for a time, and the English method of giving the medicine in less quantities, "persevering without limit," Dr. M. finds it difficult to decide, as to the comparative advantages.

"But while I must return to this question immediately, one remark seems well founded, however often neglected; and it is, that the perseverance in bark beyond a few days is nearly useless; while, if it has been said that whenever it offends the stomach, it produces no good effect, this is contradicted, as I shall presently show, by other physicians. And further, it seems often true, while even less known, that where a large dose is inefficacious, a small one is often useful; or, in reality, that ten or fifteen grains will sometimes produce a better effect than a drachm. Of the various preparations, the now common combination of kina, its sulphate, seems the only one which deserves a preference to the bark in substance, while it will probably prove to be in every instance preferable." 445.

Dr. M. next gives the opinions of various authors as to bark; but these we need not enumerate, nor even notice. We shall stop for a few minutes, however, on the subject of arsenic, a remedy that "has been lauded beyond its merits, and often also condemned and shunned, rather from the fear excited by its name than any thing else." The following sentiments coincide very nearly with our own experience.

"I have little, therefore, but my own experience to judge from; and this is, in the first place, that it is less efficacious than bark in diseases of a highly febrile character and of long duration; or that as the intermittent approaches nearer to the remittent, arsenic becomes an uncertain remedy, and that in the very chronic disease it appears to me to possess no power at all; though I know not, that, in these latter cases, it is more nugatory than any other remedy. In a new and a very simple intermittent, and in the certain particularly, it seems to offer a more rapid remedy than bark, while its superior convenience is manifest.

"But if I were to compare it with bark in those cases where the disease puts on the anomalous symptoms or characters which I have described, I should often judge it a

more effectual remedy than that; and although my own experience is far from sufficient to decide this point, I have also found it the best medicine in all the cases of the most purely local affections, or in the neuralgia; not but what it fails much too often, even in these, and particularly where they are of long standing." 452.

Dr. M. objects to the form in common use, Fowler's solution, and assures us that the common white arsenic, in powder, has succeeded, when the solution has failed. The sixteenth part of a grain is that which Dr. M. has employed, repeated three or four times a day, rubbed down with lump sugar.

"With respect to the superiority of arsenic in substance to its neutral salt, I may quote the experience of a friend, who, residing in a district where *tic douloureux* is extremely common, and where the solution seldom succeeded, now reports to me that he finds the powder almost infallible; giving it without the least inconvenience to the extent of 1-12th of a grain for a dose, and finding that its utmost limit is 1-18th, which can seldom however be endured, though having administered 1-6th without further evil consequences than gripings." 453.

This information is important, if true; but the apprehension of mistakes in the shops will prevent many from giving the common arsenic a fair trial.

"As this remedy is held to be attended with danger, and also with ultimate bad consequences, I must here bestow a few words on that subject. When given in excess, short of its properly poisonous effects, the symptoms are various, but the following have been observed; headache, sweating, tremors, nausea, vomiting, griping pains, with spasms of the lower extremities, and, sometimes, affections of the urinary passages; more frequently a red eruption on the skin, with swellings about the eyes and other parts, resembling that produced in what is called a surfeit, from eating muscles, and, in particular persons, many other substances. I must also remark, that, as in this latter case, there are individuals who thus suffer from it, even in the minutest doses, and that the eruption of the skin appears to be one of the most common effects, generally however limited to the face and the breast. That effect, together with slight nausea, are the ordinary and commonly the sole ones, unless the dose be excessive." 454.

Dr. M. has never known any ulterior or permanent ill-consequences arise from the use of arsenic. "They are all easily removed by brandy, as is the common surfeit, or by opium; and if not, they cease of themselves in a few hours."

In some constitutions, and after a few days' exhibition of the arsenic, the pulse becomes quickened, and the skin hot and dry; while there is that peculiar feeling of languor and debility that is known to result from mercury. Flatulence and sense of distention very often attend this condition. In such cases it is prudent to desist, though our author has not seen any bad consequences result further than the above. He does not believe that paralysis has ever been produced by this medicine.

On the cold bath, mercury, and purgatives, Dr. M. makes some cursory remarks, which we pass over. They are, generally speaking, condemnatory—excepting when the above means are used with great caution. Against purgation in particular, Dr. M. entertains considerable aversion.

"But in the chronic varieties, and in these, in proportion to their duration and the debility of the patient, while it is not less indispensable to maintain the bowels in a natural state, actual purging is almost invariably pernicious, unless applied to

for accidental and specific purposes, of which every physician can judge. The common, the very common effect of it, is to cause relapses or returns of a disorder that has ceased, and thus to render chronic a case that might have terminated; and when what are called courses of purging medicines have been resorted to, whether from any theory of their utility, or from a mistaken view of the symptoms and their cause, it is not unusual to see produced, the most inveterate cases of chronic intermittent, and very generally also to find them under some anomalous form that might never else have occurred." 460.

Of the truth of these observations we have seen some very curious and melancholy illustrations during the last eighteen months, a period remarkable for the prevalence of intermittent diseases under various forms. The same observations, Dr. M. adds, apply to all the cases of neuralgia under its endless modifications. Speaking of the pernicious effects of active purgation now employed in all disorders, chronic as well as acute, Dr. M. makes the following sarcastic reflection.

"If the united ignorance and presumption of self-empirics could ever find an excuse, they might indeed claim it in this case; when they see practitioners of high fame, if notoriety be fame, following similar universal systems of cure, applying salts or 'the blue pill' to every disorder or symptom in the nosology, and without inquiry; and thus, while saving themselves all the trouble of thinking, rendering physic an art which may be practised by any one, without previous study or present observation; since the Alkabeest does all.

"If it is strong language, it is scarcely exaggerated to say, that this universal tampering with salts and calomel is one of the greatest misfortunes which fashion and folly united ever entailed on England; while it is even matter for satirists, to find that a course of the waters of Cheltenham or Leamington, at once powerful and precarious, a system of active practice which can never be neutral, and which if not useful must be pernicious, is held a fashionable necessity, a mode of passing time, equivalent to any other expensive system of idleness on which society has stamped a certain reputation. But this is a small portion indeed of the evil, when we review the whole of this most extraordinary fashion, in a manner however in which I cannot undertake to examine it here. Whether the old Roman practice of emetics was more or less pernicious than that of the dinner-pills or the morning salts, it is not here my business to inquire; but he is widely mistaken who imagines that the injury produced by frequent or habitual gluttony is to be repaired by the further injury resulting from frequent or habitual purgatives." 464.

Speaking of *physic*—(whether as a *drug*, a science, or a trade, we are not quite certain)—Dr. M. unequivocally accuses it of being the the principal cause of our diseases!!

"Let any family or any individual thus educated on purgatives, (provided indeed that the health is not utterly ruined,) take but courage enough to destroy the medicine chest and *lock the door against the physician*, and they will soon find which was the cause and which the consequence." 464.

Dr. M. however, admits that there are some other causes of disease besides *physic*—for example, malaria, idleness, luxury, peculiar modes of life.

"I must also (says he) notice, as perhaps the greatest and most general cause of nervous affections, particularly in men, *a state of things which seems to have been very much overlooked by those physicians who have speculated on this subject*. I allude to the great increase of mental employment, or of study and business or occupation, requiring mental rather than bodily exertion, connected also with that which frequently becomes a species of disease in itself, EDUCATION, or study and talents, and

the latter habitually exerted—added also to confinement and all its collateral evils, and further, too often accompanied by that anxiety, with its occasional attendants or sequels, disappointment, which is the produce of the especial ambition, either as to wealth, or honours, or fame, which denotes the present times.” 467.

Still, all these are inadequate, Dr. M. thinks to the production of that wide prevalence of dyspepsia which characterises the present race of English. Purgation, he conceives, is the other grand item in the etiology of bilious, nervous, and dyspeptic disorders.

From what has preceded, we need hardly remark that Dr. M. is a decided enemy to venesection in intermittents, except under the most rigid restrictions. In the hot fit it is rarely necessary—in the intermission it is dangerous—and, we should imagine that Dr. Mackintosh's practice of bleeding in the *cold stage* must have given our worthy author an ague, considering how very susceptible he is to every morbid impression!

On the other hand, as might be expected, Dr. M. is a steady advocate for good wine and good living generally, in the class of diseases now under review. The partiality, indeed, with which Dr. M. seems to view good cheer, would induce us to believe that he has been so fortunate as to partake of the pleasures of the table, in those situations where the “feast of reason and the flow of soul” add not a little to the enjoyment of the “good creatures” of this world. We are by no means inclined to criticise his dietetics, however, where chronic intermittent diseases are to be managed. Depletion and starvation, in such cases, would be highly deleterious. On what principle, indeed, could we prescribe bark and arsenic, in conjunction with drastic purgatives, venesection, and low diet! The disease is one of debility and irritability—and in these cases, tonics, stimulants, and generous food and drink are called for.

The last subject which we shall notice is “change of air,” the efficacy of which is undoubted in most chronic diseases, but in malarious diseases particularly. It is not merely the removal from a bad air to a good one that is productive of so much benefit. The operation, in this case, seems to be that of breaking the habit of the disease—as a chronic intermittent appears very often to be a mere habit.

“If this be the case, a difference in the quality of the air breathed, which is what the popular phrase would signify, is not in itself the remedy; though respecting this we really are not in a capacity to argue at present, since it is most certain that the atmosphere in different states or places, produces effects on the body, of which our present chemistry does not enable us to investigate the causes. The lungs, or the organs here concerned, to whatever extent, are in reality chemical agents superior in discernment or power to those of our laboratories; or the involuntary and unconscious animal is that chemist which the reasoning one is not; carrying on operations which he can neither imitate nor discover, and detecting substances which he cannot find.” 492.

Here we must conclude this article—an article which embraces half a volume, and on which we have expended more labour than our readers, or per-

haps the author will give us credit for. Nothing but a strong conviction that the work before us contains a multitude of valuable gems, which readers in general will not take the trouble to pick out, could have induced us to bestow so much labour on a review, at this season of the year, (June 1828,) when the town is so full of men and malaria, that our literary labours only commence when "church-yards yawn," and all our other brethren (accoucheurs excepted) are fast asleep! In rendering Dr. Macculloch's work more accessible to the profession, by diffusing it in a portable and perusable shape, we are conscious that we are doing the state some service—and the author no injury. We have several other articles from the same work in reserve.

II.

Surgical Observations on the Treatment of Chronic Inflammation in various Structures; particularly as exemplified in the Diseases of the Joints. By JOHN SCOTT, Surgeon to the London Ophthalmic Infirmary; and Assistant Surgeon to the London Hospital. Octavo, pp. 291. 1828.

It was our intention to have noticed this work at the time of its first appearance, and with that view we then perused and examined it with some attention. By some accident, however, the copy prepared for review was mislaid; and the subject in consequence was overlooked and forgotten, until chance again, within these few days, presented the stray volume to our hands. But it is now, we fear, too late to pursue our original design; for the work no longer possesses any interest on the score of novelty, nor are its intrinsic merits such as to entitle it at this late period to an extended examination here. Under these circumstances, we shall, on the present occasion, confine ourselves within very narrow limits; our object being now, not to analyse the work itself, or expatiate on the subjects of which it treats, but simply to discharge a duty we have long imposed upon ourselves, namely, that of placing on record in these pages every cotemporary statement or suggestion, which seems calculated to be of any practical utility in the art of medicine.

1. *On the Treatment of Ulcers on the Legs.*

It is well known to most of our readers that the mode of treatment introduced some years ago by Mr. Baynton, of Bristol, for the cure of ulcers on the legs, viz. by *adhesive straps*, has never been found so successful in the hands of others, as it was stated to have been originally in his. Occurrences of this kind, however, are too common in the practice of physic to excite much surprise, and too easily accounted for on general principles to demand much investigation. Mr. Baynton's mode of treatment, therefore, has gradually been suffered to fall almost into disuse; and practitioners in

the present day are generally inclined to believe that its merits were much overstated by him, or that there was "an art and mystery" in its original application, which he did not, and perhaps could not, by mere description, communicate to others. Mr. Scott, however, a respectable practitioner at Bromley in Kent,* seems to have thought rather differently on this subject, and appears, in consequence, to have applied himself to modify and improve upon the plan of Mr. Baynton, instead of rejecting or neglecting it altogether, as others had done. The result of this has been, the adoption by this gentlemen of a mode of treatment in chronic ulcers of the legs, which will be found, we are strongly inclined to believe, on many occasions, superior to that of Mr. Baynton—but on this point the reader may determine for himself, after perusing the following statement.

When an ulcerated leg is treated according to Mr. Baynton's method, it is surrounded, as the reader is aware, by straps of adhesive plaster, applied in a circular manner over a space extending from about one inch below, to about two inches above the ulcerated part. The whole limb, then, from the toe to the knee, is swathed in a spiral roller; and as the object is to *compress* as well as *support* the parts, both this and the adhesive straps are drawn around the limb with as much force as the patient can conveniently bear.

By this mode of proceeding, however, an equal and uniform degree of support and compression never can be applied to the whole limb—for the part wrapped in *adhesive plaster* must always be subjected to a greater degree of pressure, and that more constantly applied than the parts which are surrounded by the roller alone. Hence pain and swelling and inflammation often arise in a limb so treated, which compel us for a time to suspend our proceedings, or perhaps force us to abandon them altogether.

To obviate these inconveniences Mr. Scott proposes, 1st, that the whole limb should be equally and uniformly covered with adhesive plaster, as well as with the roller—and 2dly, that both the straps and the roller should be applied with such a degree of force, only, as may be sufficient to support the parts steadily, without compressing them into a smaller compass, as recommended by Mr. Baynton. "With regard to the method of fulfilling these indications" the following directions are given by our author.

"The Emplastrum Plumbi, spread on calico, is the best application, as it does not irritate the skin.† It is most conveniently made use of when cut into slips of fifteen inches in length by two in breadth.

"The foot being placed at a right angle to the leg, one of the slips should be ap-

* We say Mr. Scott of Bromley, for it is with him we believe, and not with the author of the work before us, (who is his son,) that the plan we are about to notice originated.—*Rev.*

† An effect, we may observe, which the plaster made use of or recommended by Mr. Baynton often did produce, in consequence of the quantity of *resin* it contained.—*Rev.*

plied from the first bone of the great toe, along the inner edge of the foot, around the posterior part of the os calcis to the first bone of the little toe; the middle of another slip should then be placed under the bottom of the os calcis, and its ends extended perpendicularly up on each side of the leg; the third is to be applied along the foot, parallel to the first, and overlapping the half of it; the fourth should be placed parallel to the second, overlapping the half of it, and extending perpendicularly up the sides of the leg. In this manner they (the slips) should be applied alternately along the foot, and up the leg, the one holding and as it were antagonizing the other in the motions of the foot until the whole limb is covered from the toes to the knee. Subsequently to this, a calico bandage is applied in the usual manner, first alternately around the foot and ankle, and then up the leg as high as the knee.

"It is necessary to be particularly careful that the plasters and bandage be applied in such a manner that their superior and inferior edges are accurately placed in apposition to the skin, otherwise they will exert an unequal pressure, which is highly injurious. The whole should be applied with only that degree of tightness which is perfectly agreeable to the feelings of the patient, and not with a view of compressing the parts into a smaller space. In this manner every vessel in the limb will be uniformly and effectually supported.

"In respect to the time at which it will be necessary to renew the applications, that must be regulated by the quantity of the discharge, for when applied in the manner that has been described, they will remain for weeks, or even for months, without altering their position in the least." 15.

2. ON THE TREATMENT OF CHRONIC ENLARGEMENTS OF THE JOINTS.

It sometimes happens that certain joints in the body are attacked with pain and stiffness, and swelling, of a character so indolent, as scarcely to excite any constitutional disturbance, yet, at the same time, so obstinate as to resist all our ordinary modes of treatment. Under these circumstances the disease, of which these symptoms form a part, continues in general its progress onwards, slowly indeed but steadily, until all the parts and tissues of which the affected joint consists, are involved in one destructive process, and a state of general irritation is produced which threatens the patient's life.*

To avert this danger the affected limb must often about this time be removed altogether—or such other measures perhaps be adopted as will lead, if successful, to the permanent extinction of all motion in the joint.

Death, then, or mutilation, or a stiffened joint are the only terminations to which, generally speaking, we look forward in the present day in cases of disease such as that now under consideration. Mr. Scott, however, assures us that his father, the gentleman already alluded to in this article, has long been in the habit of treating such cases with a very different result; and professes, in the work before us, to make known a plan of treatment, for

* The knee, ankle, elbow, and wrist, are the joints most usually attacked by this disease; which, from the appearance of the part affected is vulgarly denominated *white swelling*, and by the learned, from one of its usual effects or symptoms, *arthritis*, that is to say, *a joint with pus in it*—*αρθριτις*.—*Rev.*

such affections, "the efficacy of which," he says, "I have seen verified in numerous cases, first, under the care of my father, and since under my own."

This plan consists in the simultaneous and steady application to the part affected, of moderate pressure, and a camphorated mercurial ointment—under the combined influence of which, as we are assured, the pain and stiffness, and swelling, will in general gradually disappear, and all the parts return to a healthy state. The details relative to this plan we now proceed to give in our author's own words, premising merely that the application of leeches will sometimes be necessary as a preliminary measure in cases where symptoms of active inflammation exist.

"In the first place, the surface of the joint, suppose the knee, is to be carefully cleansed by a sponge, soft brown soap and warm water, and then thoroughly dried; next this surface is to be rubbed by a sponge soaked in camphorated spirit of wine, and this is continued a minute or two, until it begins to feel warm, smarts somewhat, and looks red. It is now covered with a soft cerate made with equal parts of the *Ceratum Saponis* and *Unguentum Hydrargyri fortius cum Camphorâ*.* This is thickly spread on large square pieces of lint, and applied entirely around the joint, extending for at least six inches, above and below the point at which the condyles of the femur are opposed to the head of the tibia; over this, to the same extent, the limb is to be uniformly supported by strips of calico, spread with the *emplastrum plumbi* of the London Pharmacopœia. These strips are about one inch and a half broad, and vary in length; some are fifteen inches, others a foot, others half these two lengths, and the shorter or longer are selected according to the size of the part round which they are to be applied."

"Over this adhesive bandage, thus applied, comes an additional covering of *emplastrum saponis*, spread on thick leather and cut into four broad pieces, one for the front, the other for the back, the two others for the sides of the joint. Lastly, the whole is secured by means of a calico bandage, which is put on very gently, and rather for the purpose of securing the plaster, and giving greater thickness and security to the whole, than for the purpose of compressing the joint. This is an important point, as otherwise an application which almost invariably affords security and ease, may occasion pain, with all its attendant mischief.

"In some cases, in which the skin is thick and indolent, sufficient irritation will scarcely be excited by the above applications, and this may be promoted by rubbing on a small quantity of tartar emetic ointment previously to the application of the cerate. This, however, is rarely necessary.

"In some cases, also, it is desirable more effectually to prevent the motion of the limb, particularly in children. This may be done, by applying on each side of the joint, externally to the plasters, a piece of pasteboard, softened by soaking in water, and cut into the length, breadth, and form of splints. These being soft, will accommodate themselves to the figure of the joint, and, when dry, effectually preclude all motion."

"The remedies thus applied will not require very frequent removal. The time during which they may be left undisturbed, will depend chiefly on the necessity for a repetition of the bleeding, in which we must be guided by the degree of pain, or when there are open abscesses, by the quantity of the discharge. Should neither of these influence the question, the only necessity for removing the dressings will arise from their having ceased to keep up any irritation in the skin. In some cases it will be necessary to re-apply them every week; in the generality of instances they may be allowed to remain a fortnight, and in others for a longer time. Even where there are open wounds, I allow them to remain several days, or a week, being firmly convinced by experience that the presence of the matter does less harm than the frequent disturbance of the part. A strumous ulcer can scarcely be disturbed too seldom; nothing does so much harm as officious dressing and probing." 139

* The author has not told us any where the relative quantity of camphor employed by him or his father in this composition, which is not official.—Rev.

III.

Memoir on Lateral Depression of the Thoracic Parietes. By BARON DUPUYTREN.

THIS is not the contraction or depression described by Laennec, the result of inflammation and effusion in one side of the chest—but a congenital deformity of no unfrequent occurrence, and one which exercises a considerable influence on the functions of the heart and lungs. Not a month passes without numerous examples of this congenital defect being presented to the observation of Baron Dupuytren. It consists in a greater or lesser depression of one side of the thorax, with a proportionate protuberance or saliency of the sternum—the abdomen forwards—or the vertebral column backwards. There are a few scattered observations on this species of deformity, in the writings of Van Swieten, Petit, and others, who have attributed it to rickets, or other diseases, and who were evidently unacquainted with its nature, causes, effects, or remedy. This deformity is seen more especially among the children of scrofulous, rickety, and unhealthy parents, residing in damp and unwholesome localities, and who are badly fed and scantily clothed. In children affected with this deformity, the ribs of the two sides are sometimes so much approximated, that the hand can span across the chest, the sternum being, of course, bulged out in proportion; for whatever space is lost in one direction must necessarily be gained in another. But this equipoise of dimensions does not enable the heart and lungs to perform their functions as well as in a properly formed thorax. There is caused an habitual shortness of breath and voice—a great oppression—a sense of indescribable anxiety. In the newly-born infant there is great difficulty in sucking, threatening of suffocation, and a necessity for frequently dropping the nipple, which sets the infant crying. At a more advanced age, the voice is broken, and the sentences rendered very short. All these symptoms are much increased by exercise, especially by ascending stairs, or a hill—as in people who have organic diseases of the heart. The resemblance is farther increased by irregularities in the pulse, and other symptoms attendant on cardiac diseases. While asleep, people with this deformity generally breathe with their mouths open, and make much noise. Their sleep too is much broken by terrific dreams. These symptoms are sometimes carried to the pitch of impeding the developement of the vital functions, and death is the consequence almost immediately on birth—or at various periods afterwards, according to the degree of deformity. Even when death is not thus produced, the infants are often seen lingering out in a sickly emaciated condition, with a very feeble developement of their intellectual faculties. It is very remarkable, that a frequent attendant on this vice of conformation, is a considerable swelling of the tonsils—a consequence or connexion for which we cannot account. This swelling of the tonsils adds greatly to the difficulty of breathing, and other inconveniences produced by the lateral depression. M. Dupuytren has been frequently obliged to remove these tonsils on account of their great enlargement, and the embarrassment which they occasioned the respiration. This operation always gave much relief. Pulmonary catarrh is another frequent attendant on this deformity, and proves a very formidable complication, especially where the tonsils are enlarged. The breathing is then incommoded by three different causes. But the most dangerous affection which can supervene on this deformity, is whooping-cough. An infant with lateral depression, enlarged tonsils, and whooping-cough, presents one of the most melan-

choly spectacles of suffering that can be imagined! He generally dies in one of the paroxysms of coughing. Baron Dupuytren has been obliged to remove the tonsils of children at the breast, rather than see them perish by suffocation. The operation, at such an early period of life, is extremely difficult, and nothing but the most urgent circumstances would induce him to attempt it. One of his most ingenious pupils, however, Doctor Lemaître, has invented a *speculum oris*, which renders the operation comparatively easy and void of danger. By means of this instrument, the mouth may be kept open, the tongue depressed and motionless, and the tonsils readily removed.*

An examination of many children who had died of this disease, or of it and some of its complications, demonstrated a retardation of developement in the skeleton, as evinced by various phenomena, such as the non-closure of sutures in the head, the persistence of epiphyses, the softening of cylindrical bones, &c. The lungs were found, of course, to take the impressions of the different parts of the thorax.

Treatment. This, at first sight, might seem hopeless—but it is not so. Much may be done by bitters, tonics, and those remedies which are employed in scrofula, care being taken not to push them so far as to render the respiration incommoded. To these general means, must be joined local ones; and the most important is exercise, (especially of those muscles which extend from the chest to the arms and shoulders,) combined with frequent pressure on the sternum. The exercise has for its object to elevate the ribs, and consequently to expand the dimensions of the thorax. Any person may invent a simple contrivance for executing this kind of exercise by means of pulleys, cords, and weights. With this exercise, as we before observed, the sternum ought to be daily pressed backwards, so as to bring the chest to its natural rounded form, instead of its flattened shape. By these means the Baron has effected numerous cures of this vice of conformation, when the cases were thought to be totally beyond the reach of art. This pressure is better effected by the hand than by any spring or other apparatus. The Baron places the back of the little patient against his knee, or against a wall, and then makes pressure on the sternum with the palm of his hand, removing the pressure at every inspiration, and re-applying at each expiration. "I have often (says he) observed with attentive curiosity the immediate effects of this exercise—viz. a momentary return of the chest to its cylindrical form, with a corresponding freedom of breathing—and a relapse into its ordinary flattened shape when the pressure was removed." This pressure should be made from ten to a hundred times a day, if possible, and should be continued for several minutes each time. The oftener the pressure is exercised, and the longer it is continued at a time, the more efficacious it will be found. The mother is generally the only one who should be entrusted with this operation. No other will take the pains, or have the patience to persevere. Four cases are detailed in illustration of the foregoing descriptions and precepts; but they do not require insertion in this place, as the directions are plain and intelligible. We think it is the duty of every medical practitioner to carefully examine the naked bodies of infants that appear to labour under any difficulties of function about the chest. By this early inspection much error may be avoided—much good may be done.—REFERTOIRE.

* We wonder that some of our English "voyageurs" do not send over this instrument to England. It must prove extremely useful on many occasions, while surgeons are operating on parts within the mouth or throat.—ED.

IV.

New Method of treating Artificial Anus. By BARON DUPUYTREN.*

M. DUPUYTREN has published a long and interesting paper on the cure of that most disgusting and dangerous malady, artificial anus. The affection, or rather affliction, has been hitherto considered as incurable, but we are assured by the able author of the Memoir, that, after the details which he has given, and the treatment which he recommends, it will be ranked with those diseases which, with little difficulty or danger, admit of relief from art. This is so encouraging a prospect, a consummation so devoutly to be wished for, that we betake ourselves, *con amore*, to the drudgery of analysis and abridgement.

The Baron commences his Memoir, with a series of preliminary observations, the object of which is to demonstrate, that different portions of the alimentary canal play different parts in the elaboration of the chyle, and that, if the natural condition of the tube be altered or disturbed, that very important office will be altered and disturbed also. These are very obvious truths, and we shall pass them over.

The preternatural opening of the intestines is rarely congenital, but mostly results from wounds, inflammations, abscesses, or hernia, and especially the latter, to which the Baron confines his observations.

The establishment of an artificial anus is by no means so simple a process as would, at first sight, be supposed. The intestine which is to form the anus, must be opposite that part of the parietes of the abdomen through which the matters are to make their exit, and it must be retained in this situation, or eventually fixed in the opening; a ready communication must be maintained between the external aperture and the bowels; and, above all, these last must be capable of adhering to the surrounding parts, a combination of circumstances which experience has shown to be rare. The new anus, when established, is generally round, but occasionally irregular; from a few lines to an inch or more in diameter; and surrounded by radiating plaits of the integument. The cicatrix of the border unites the skin of the belly to the mucous membrane of the bowel, whilst the intestine and abdominal parietes are joined together by inflammatory adhesions, which always commence in the serous surface of the intestine and abdominal cavity, and extend to the other textures, the skin and the mucous membrane. Their extent is, in general, from half a line to a line, sometimes several, and rarely half an inch. The connecting medium is first glutinous, then cellular, and, at last, of a fibrous structure, when it is firm enough effectually to resist those causes which tend to separate the bowel from the walls of the abdomen. As the adhesions extend only a small distance along the gut, a *cul-de-sac* is formed, the opening looking

* Mémoires de l'Académie Royale de Médecine, Tome I.

towards the belly, into which the abdominal viscera may protrude, and complicate, more or less, the artificial anus.

The opening of the anus is mostly occupied by the puckered internal membrane of the bowel, which not unfrequently protrudes, and proves a source of inflammation to the mucous membrane. The eversion varies in length from one to fifteen inches, or even more, and generally occurs from the upper end of the intestine, sometimes from the lower, occasionally from both.

Between the opening of the skin and the bottom of the artificial anus is a funnel-shaped cavity, of which the skin forms the border, and the intestine the base, and which varies in length, direction, and dimensions. In proportion as these dimensions are greater, the tendency in the disease to be cured by nature or by art is greater also. At the bottom of this cavity are the orifices of the two extremities of the intestine, the upper of which is much the larger, and the partition which divides them. The extremities of the intestine, to which the orifices lead, are villous, covered with mucous secretions within, and serous without, and retire into the abdomen, sometimes crossing and sometimes parallel, but generally separating at an angle more or less acute. The partition between the orifices is produced by the juxta-position and adhesion of the sides of the intestines, and juts out nearer to, or farther from the skin, in proportion as the intestine has suffered a greater or less loss of substance from mortification, or undergone a more or less considerable change in its situation. When the gut has been merely pierced by a wound or eschar, it is small, and scarcely to be seen, so that there exists between the two orifices of the bowel a kind of gutter, directing the transit of matters from the upper to the lower, and greatly facilitating the attempts at cure. When, however, the whole circumference of the intestine has been destroyed, it is very great, and forms a projecting angle or buttress between the ends of the intestine, which its contents can neither break down nor get round.

This *buttress*, examined from the cavity of the intestine, has a semilunar shape, but, viewed from within the belly, it is seen to unfold itself and the two equal parts of which it is composed, receive the mesentery between them. This results from its consisting at every point, except its acute edge, of two sides, having a triangular interval between them, which grows larger, in proportion as they separate from each other on entering the abdomen. The surfaces of this double partition towards the belly are smooth and unadherent, so that, to pass from one extremity of the intestine, through the partition, to the other, it is necessary to traverse the peritoneal cavity, a circumstance attended, of course, with considerable danger.

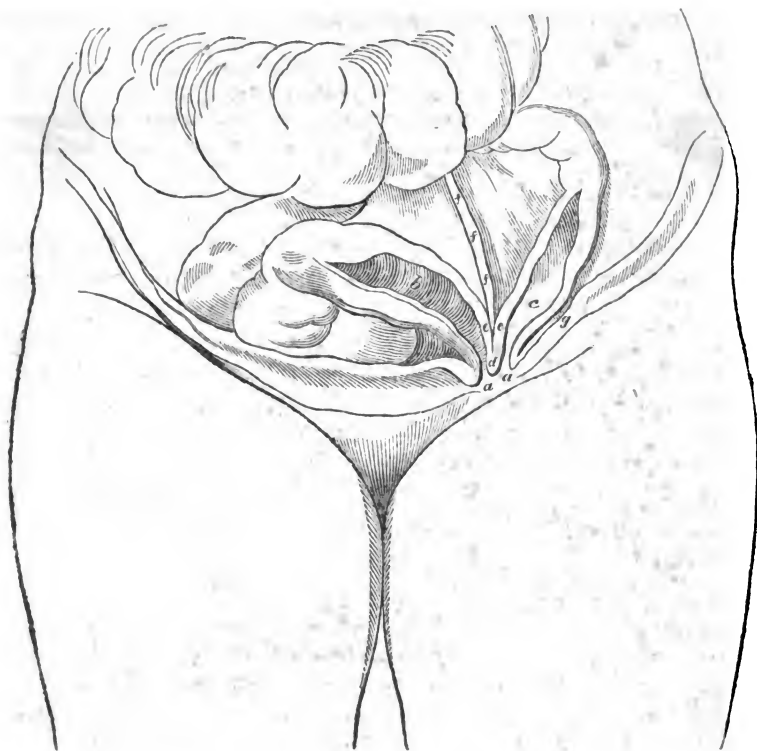
The buttress and double partition are attached to the mesentery and follow to a certain extent, the movements communicated to them by that ligament. The mesentery itself, stretching from the vertebræ to the concave side of

the intestinal convolutions, is always more or less dragged on when the intestine is in any way protruded from the belly, in which case it forms a kind of cord from the vertebral column to the part of the bowel most distant from it. This cord is necessarily tense, and inclines the body forward, as is particularly observed in adherent herniæ. In the artificial anus, the intestine is constantly pulled inwards by the mesentery, in proportion to the tension of the membrane; and in two cases M. Dupuytren has known it sufficient to destroy the adhesions between the bowel and walls of the abdomen, causing fatal laceration, and effusion into the cavity of the peritoneum. From this, it is obvious that position, and the movements of the body, must have a considerable influence on the cure of the disease.

The action of the mesentery is continued long after the malady is removed. Several patients who had been cured of artificial anus were re-admitted into the Hôtel Dieu, and died of other diseases, when dissection showed the intestine, not adherent to the walls of the abdomen, but free and unattached, a fibrous cord, however, still continuing stretched between them. This last was so attenuated at its middle, that its laceration would probably have soon destroyed even the last trace of the derangement which had attended the formation of the artificial anus.

Of the two extremities of the intestine divided by the intermediate partition, the upper is by far the larger, because its activity is increased by the presence and passage of the intestinal contents, a change in which the mesentery and mesenteric glands participate. The lower portion not performing its natural functions, becomes attenuated, though not entirely obliterated, as it is filled to a certain extent with a soft, white mass, of albuminous appearance, which is an imperfect intestinal secretion, and may remain undecomposed for months, or years, till it is either voided by stool, or washed out by injections. The orifice of this lower portion of the bowel is generally narrow, puckered up, and difficult to find, from the buttress being thrown down upon it by the passage of the fæculent matters from above, and acting as a kind of valve.

Another consequence of the disease is the loss of the natural mobility of the gut, which is absolutely fixed by the new adhesions. The fixed portion thus becomes a *point d'appui* for the efforts of the canal, so that the fæces are constantly directed towards it, and their progress from the stomach downwards actually accelerated. The space traversed by the aliments is shortened, as well as the period of their detention—their digestion is incomplete—nutrition is impaired, according as the anus is farther or nearer from the stomach, and the evacuation of the bowels is no longer voluntary. In the original is a lithographic plate, representing the parts of which the foregoing anatomical description has been given. To make that description intelligible, we shall introduce a wood-cut here, copied from the original lithograph, but on a smaller scale.



EXPLANATION OF THE WOOD-CUT.

- (a) Opening of the artificial anus, and point of union between the mucous membrane and the skin.
 (b) Upper end of the intestine.
 (c) Lower end of the intestine.
 (d) Buttress formed by the union of the walls of the two intestines.
 (ee) Walls of the intestine, forming the "double partition."
 (f) Cord or ligament formed by the mesentery.
 (g) Infundibulum or *cul de sac*, between the peritoneum of the intestine and of the abdominal parietes, into which herniæ occasionally protrude.

With regard to this involuntary evacuation, the opening is not surrounded by any sphincter, and is, therefore, always open to the matters which are constantly coming up. If there were a sphincter, still there would be no reservoir, like the large intestine, and, consequently, there would still be a constant flow of mucus, biliary, alimentary, or fæculent matters, according to the state of the digestion and situation of the opening, affecting the person of the patient with an abominable smell, and disposing the parts to excoriations, erysipelas, and an intolerable itching, which renders life a burthen. Compression, so as to retain the matters within the bowel, has been tried, but often given rise to the greatest mischief. The projection, more or less, of the buttress which divides the extremities of the intestine, is evidently the cause which opposes or facilitates the cure, and the mode in

which this obstacle can be overcome is a serious question. Are we to push back towards the belly the parts which form it? divide them by incision—by ligature—or by a slow and graduated section?

The obstacles to the cure of artificial anus, though considerable, have been more than once surmounted by nature and by art. The loss of substance in the intestine is certainly irreparable, but still it may be compensated for, in some degree, by the extension of its parietes and dilatation of its cavity. The adhesions between the gut and the abdominal parietes may become relaxed, and the projection or buttress be diminished by the dragging of the mesentery, and the efforts of the fæces to pass from the upper end of the intestine to the lower. A liberal diet, the use of purgatives, the introduction of tents, position, and compression, have each and all been attended with occasional advantage and success.

When the anus is no more than a simple perforation of the gut, whether accompanied by hernia or not, it is little more than a fistula, behind which the calibre of the gut is perfect, and is almost always curable. A cure by the above means will frequently take place when a third, or even half the circumference of the intestine has been destroyed for the length of a few lines or an inch, but if upwards of two-thirds or three-fourths of the circumference, and a greater portion of the length, are gone, the cure becomes extremely difficult, in consequence of the contraction of the intestine, and prominence of the buttress and partition. According to M. Dupuytren's calculations, two-thirds of the cases of artificial anus are cured by the ordinary methods, and the remainder require a more efficacious treatment.

The adhesions between the intestine and the walls of the abdomen were, in the first instance, the preservation of the patient, his safety always in a great degree depends upon them, and, consequently, they ought not to be meddled with, Rhamdor placed the two ends of the intestine within each other, and, having maintained them there by suture, replaced them in the cavity of the abdomen. The dangers of such a plan are obvious, and it ought not to be followed.

The only feasible method which remains, is to attack the buttress and partition, which prevent the flow of fæces through the tube, and direct them to the artificial anus. A simple section of the projection by the scissors or other cutting instrument, would most probably be attended with an almost immediate death, from a passage being opened for the fæcal matter into the cavity of the abdomen. On this account, division by a cutting instrument was out of the question; but it seemed more reasonable, and certainly more safe, to push back the projection by pressure from without, so as to imitate, in some measure, the dragging of the mesentery from within. M. Dupuytren constructed an instrument, which he tried upon a patient at that time (1809) in the Hôtel Dieu, but colic and nausea were produced, and the attempt was given up.

The idea of perforation next presented itself, but still the peritoneum, which surrounds the two extremities of the gut which forms the artificial anus, would be wounded, and effusion of the fæcal matters would result. One of the most remarkable properties of serous membranes, when inflamed, is to contract adhesions, and M. D. imagined that, if he could get the two surfaces of the gut to adhere together, he might afterwards perforate them with perfect safety.

The passage of foreign bodies, as pins and needles, through the parietes of the abdomen or intestines, is always preceded by the adhesive inflammation, and our author conceived that he might, in the same manner pierce

the partition by a needle, armed with a thread. This would fill the void which had been made, and, having excited a degree of inflammation around it, might be gradually increased in size, until large enough entirely to destroy the partition. With the view of confirming his opinions by experiment, M. D. passed needles, armed with threads, through the intestines of several dogs, replacing the whole in the abdomen. Adhesive inflammation followed, the ligatures were either voided by stool, or taken away by gently pulling both ends at once, and in not a single instance did effusion occur. An artificial anus was even made in one dog, with the same results.

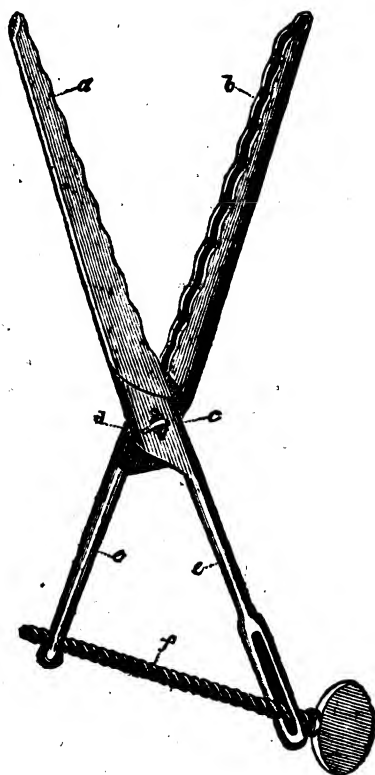
In 1813, a man who had laboured under strangulated hernia for five days, was admitted into the Hôtel Dieu with an artificial anus. Pressure was employed, but it gave rise to severe symptoms, and was abandoned. At the expiration of six weeks, the cure had not advanced, and the patient was very anxious that something should be done. Accordingly M. Dupuytren passed a needle across the buttress and partition, which projected very considerably, and, having withdrawn the needle allowed the thread to remain. No unpleasant symptom was the consequence, and, some days afterwards a skein was substituted for the thread, when flatus began to be discharged by the natural anus. The size of the skein was increased each dressing, colicky pains occurred, and some faeces were passed by the anus. The size of the skein was increased so far, that one day the buttress was completely lacerated, but without any ill effect. Stercoraceous matter continuing to be voided by the artificial anus, M. Dupuytren divided, half a line at a time, by means of blunt-pointed scissors, directed on the fore-finger, those parts of the partition situated above the opening made by the thread. The incisions were cautiously made at intervals of three or four days, the adhesions that had formed were never passed, and the communication was soon so free, that the faeces passed entirely by the natural anus. Compression on the artificial opening was then employed, but the patient urging the surgeon to hasten the cure by some fresh attempt, several projections around the aperture were tied and excised, and then the partition divided higher than it had yet been done. In a few hours, acute peritonitis supervened, and the patient died. On dissection, the evidences of inflammation were discovered, but no effusion or opening into the cavity of the abdomen. The communication between the extremities of the gut was re-established for the space of two inches, and there was every reason to believe that, but for the peritonitis, the disease would have been cured.

On consideration, M. Dupuytren was determined to abandon the employment of the needle. In the above case it produced no effusion, yet, by penetrating the parts before adhesion is produced, it might be attended with that result in others. It would also be extremely difficult, by the above means, to divide the partition at such a height, as in every case to open a communication sufficiently free between the two ends of the intestine; and, finally, if the sides of the gut were separated when the needle pierced them, adhesion could not be produced, but, instead of it, a very dangerous communication with the cavity of the abdomen. On these accounts, the needle was abandoned.

The point appeared to be, to keep the parts in contact till adhesion had occurred, and then to effect their division, but not before. After many trials on animals, and the dead body, M. Dupuytren thought he had discovered the instrument he sought for. It consists of a screw and two branches, each about seven inches long. One branch, which may be called the male, being received into the other, has a blade four inches in length, three lines in breadth, and half a line in thickness at its edge, which is undulated, and terminated by a spheroid button. At the union of the blade with the handle is a mortise some lines in extent; the handle itself is one, two, or more inches, and has another mortise, three or four lines broad, which runs nearly

the whole of its length. The female branch is not quite so long. It is formed at one of its extremities of two blades, of the same length, breadth, and thickness, as the small blade, and between the two is the kind of gutter or sheath in which the small blade is received, whilst the button of the latter is received into a cavity at the corresponding extremity of the former. At the junction of the blade with the handle is a moving pivot, which passes into the mortise of the other branch, and the handle itself is terminated by a hole to receive the screw.

This last part of the instrument, a screw of several threads, is an inch and a half in length, and terminated by an oval plate; it is placed in the mortise of the male branch, and fixed in the female, its use being to separate or close at pleasure the two blades of the *enterotome*, the name which is given to the instrument.



EXPLANATION OF THE WOOD-CUT.

The Cut represents the Enterotome open.

- | | |
|-----------------------|--|
| (a) The male blade. | (e) The handles. |
| (b) The female blade. | (f) The screw by which the handles, |
| (c) The joint. | and, in consequence of their crossing, the |
| (d) The moving pivot. | blades, likewise, may be approximated. |

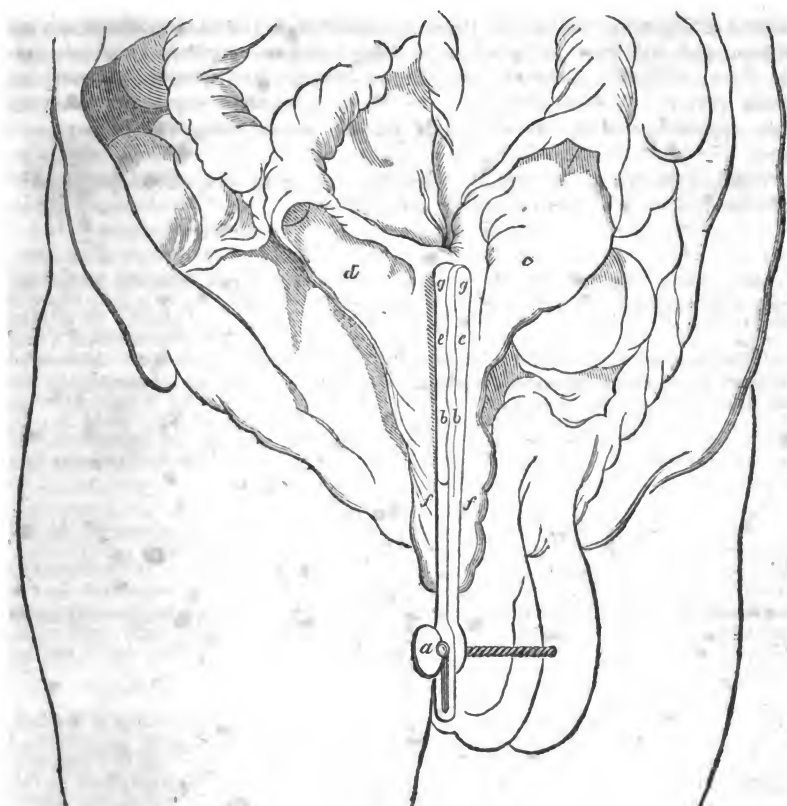
The application of it is as follows. The two branches, which may be separated or united at pleasure, provided with blades, and undulating and

very blunt edges, are put in motion by means of the screw which passes across their handles. Whatever the blades inclose, is grasped and retained by them, partly by means of their denticulated edges, partly from the one being received within the other. At first, the parts inclosed are merely kept in contact by the pressure, but this may be afterwards so far increased as to destroy their vitality, though not immediately divide them, on account of the bluntness of the edges. Before employing the instrument on the human subject, M. Dupuytren made experiments on animals, in whom he always succeeded in dividing the parts inclosed in six or eight days. When serous membranes were confined, both they and the parts invested by them had united by the second or third day, whilst the solution of continuity never occurred till the seventh or eighth.

The adhesions so necessary to the safety of the patient, were continued on each side of the branches of the enterotome, throughout their whole extent, were easily destroyed during the first few days, but, by the sixth or seventh, were so firm as to resist considerable force, and at length acquired a cellular structure, and the strength of a natural connexion. The employment of the instrument was in no instance attended by severe pain, and the inflammation confined to the immediate neighbourhood of the parts inclosed. M. Dupuytren was the more surprised at this, as the instrument is not a simple cutting one, but produces a slough of the parts which it contains, which slough invariably separates between the blades. Satisfied with the results of his experiments, our author at length employed the enterotome in the case of a patient at the Hôtel Dieu.

Case. Ménage, æt. 26, was admitted into the hospital, in the month of January, 1816, with an artificial anus in the right groin. He had been subject, since infancy, to an inguinal hernia, which became strangulated about a year before his admission, and terminated in mortification of the gut. The operation was performed, and an artificial anus was established, through which the evacuations passed, generally about an hour and a half after a meal. Eight weeks after the operation, he was attacked with colic, and passed his evacuations per anum, which afterwards occasionally occurred, though at considerable intervals.

On admission the artificial anus was at least half an inch in diameter, and bordered by irregular protrusions of the mucous membrane of the gut, whilst behind there appeared, on the least exertion, a hernia, which frequently gave rise to invagination of the intestine. The skin around was raw and sore, the sufferings of the man excessive, the smell intolerable. The patient being anxious for an operation, M. Dupuytren, after calming the irritation of the parts, began to search for the two extremities of the intestine, and the exact position of the partition between them. At length this was accomplished, the blades of the enterotome separately introduced as high as they would go, into each portion of the gut, and joined together moderately close. No pain was felt, and, on the next day, the blades were tightened, when some colic was experienced. In a few days, the blades were somewhat moveable. On the sixth, there were slight evacuations per anum, and, on the eighth, the instrument fell off, the blades containing a membranous band, in which the tunics of the two parietes of the gut were recognized. The length of the band was twenty lines, and its breadth two, forming the measurement of the depth to which the blades had gone, and the extent of the partition which had been removed within them. From this period, the fæces passed by the natural anus, but the artificial one, though narrowed, still continued open, notwithstanding the use of pressure, bandaging, sticking plaster, and lunar caustic. At length the edges were pared off, and brought together by the twisted suture, whilst a particular instrument for making pressure was employed. At the expiration of four months, the patient was presented to the Faculty of Medicine, entirely cured.



See Memoir.

A difficult part of the operation is to discover the lower orifice of the bowel, which requires that the finger or soft probe must be frequently employed for several days. This being ascertained, and the patient placed upon his back, one of the blades of the instrument is introduced, upon the index finger, into one of the orifices, to the depth of one, two, or three inches, according to the nature of the case. This blade is then given to an assistant, and the other introduced in the same manner into the other extremity of the gut, when they are joined together, like common forceps, by putting the tenon of the one into the mortise of the other. The partition is then enclosed within their blades, and, as the action should be slow and gradual, it is regulated by the screw. The pressure should destroy the life of the parts from the first day, as the pain and inflammation are thus prevented; it should also be increased every other day, by giving the screw a turn or two. Pain and colic are seldom experienced, at least, to any great extent, and, after a few days, the instrument becomes a little moveable, the mobility increasing from day to day, until the enterotome at last falls off, which always happens between the seventh day and the tenth. The blades are nearly closed, and embrace within them the buttress and partition. Evacuations per anum sometimes precede the falling off of the instrument, are

at first albuminous and white, then numerous, liquid, and stercoraceous, accompanied with pain and gripings, and gradually they become solid and less frequent, whilst the voracious appetite disappears, and strength and embonpoint, return. It generally, however, requires several weeks to obliterate the artificial opening, which is invariably the most difficult portion of the cure.

In the following case, the artificial anus was not the result of hernia, but of a wound, with loss of substance of the gut.

Case. Louis Jubert, a man of very weak intellect, received a rupture on the left side, which, after fifteen years, was as large as an infant's head, and in a great measure irreducible. Believing himself an object of ridicule, he one day opened the hernial sac, and gave issue to eighteen inches of intestine, when he grew frightened, and sent for a surgeon, who with difficulty reduced the gut, and the case did well. At the end of three years, this monomaniac made another incision, into the sac, and actually cut off a portion of the intestine. The surgeon was again sent for, and brought together the two extremities of the divided gut by sutures, which, though they failed in producing union, excited inflammation enough to glue the edges of the intestine to the wound, and form an artificial anus. Two inches and a half of the small intestine had been removed.

In March, 1824, he was admitted into the Hôtel Dieu, with a tumour on the left side, stretching from the ring to the bottom of the scrotum, hard, shining, partly reducible, and having the artificial opening at its lower and anterior part. The extremities of the intestine were situated side by side, that on the right giving continual issue to fluid fæces and undigested matters, whilst nothing was discharged from the left, which was much retracted. The man was in a filthy state, and suffered greatly from colics and a fixed pain in the left iliac region. Compression was employed, but it excited such symptoms that it was given up.

On examination, it was found that the *stomach* extremity of the gut was at the bottom of the scrotum, where it formed inextricable circuvolutions, whilst the *rectal* end led directly towards the inguinal canal. The case was a bad one, but the man was urgent that something should be done, and, on the 31st of May, M. Dupuytren, in the presence of M. M. Larry and Sanson, introduced the instrument in the manner which has been before described. The upper blade could only be carried to the depth of from two to three inches. On the next day, there was œdema and redness around the wound, on the sixth and seventh, slight colics, and, on the eighth, the instrument fell off. Clysters were daily given, and fetid gas, but nothing more, passed per anum. On the 14th day, the patient thought some fæces came away, and the volume of the tumour was diminished, soon after which violent pains were experienced in the belly, and the evacuations became established in the proper channel.

The volume of the tumour went on diminishing, but fæcal matter was still discharged through the artificial opening. To check this, an instrument was constructed, which produced very effectual pressure, but, as it sometimes fell off, and produced excoriation of the parts, it was removed, and a herniary bandage substituted in its stead. The patient now gained flesh and spirits, whilst the fæces were not only re-established by the natural passage, but the hernial tumour, which had been the cause of all his miseries, was returned into the abdomen. A triangular flap of skin, situated at the upper part of the artificial anus, was touched with a solution of lunar caustic, as well as the edges of the opening, and the two brought together by a proper bandage. Union took place, and the cure was completed in less than five months from the admission of the patient.

M. Dupuytren informs us, that twenty-one operations have been performed by himself with the enterotome, and twenty by other practitioners. Out of the forty-one patients thus operated on, three only died, one from effusion of fæcal matter into the abdomen, one from indigestion, and one from peritoneal inflammation. Of the thirty-

eight remaining patients, the greater number experienced no bad symptoms whatever; twenty-nine were radically cured in from two to six months, and nine preserved, in spite of every thing, fistulous openings of greater or less extent, which obliged them to wear a bandage. Three-fourths of the anuses were the consequence of gangrene from strangulated hernia, and the other fourth of wounds, with loss of substance in the intestine.

It appears, then, that the mortality of the operation is one in fourteen, and if we exclude the case of indigestion, which cannot fairly be considered a consequence of the operation at all, it is reduced to one in twenty.

We have thus, at considerable labour, presented our readers with an analysis of the above paper. In the original, it occupies nearly sixty pages, and we have compressed it, by means of a smaller type, and much abridgement, into ten or eleven. The memoir itself is interesting, the plan of treatment ingenious, and highly deserving of attention, as it promises, in many cases, to remove one of the most loathsome maladies that flesh is heir to.

V.

Observations on Hospital Gangrene, &c. By J. BOGGIE, M.D. Surgeon to the Forces.

[Transactions of the Medico-Chirurgical Society of Edinburgh, Vol. III. Part I.]

ALTHOUGH names are conventional, and, in their etymology, frequently convey no idea of the things they were designed to express, it does not seldom occur that, by their misapplication, they either communicate one entirely, or partially, false. It would certainly be difficult to construct a vocabulary, every term of which would be an epitomized commentary upon the object to which it was appropriated; but we conceive that much improvement is required, and that much improvement could be made; and that, in those cases wherein it might prove impracticable to make names the etymological signs of things, it would at least be easy to select such appellations as would not mislead, when they could not instruct.

Hospital gangrene only denotes one variety of this disease, and a variety in its geography, not in its essence. But hospitals do not occupy the whole map of this affection; its blight visits different and distant localities, and no wound lies without the limits of its influence. Wherever its causes exist and operate, whether in the public lazaret-house, or private home, its destructive properties will be seen and felt, and hospitals are merely the more frequent arenas of its power, by being more frequently infested with the circumstances which favour its production.

We would, therefore, prefer the epithet *contagious gangrene*, as more expressive and not less correct. This designation conveys to us the leading feature of the disease; and, since the place of its occurrence is as acci-

dental as the spots upon which pustules rise in a case of variola, we would discard an epithet too exclusive to be general, and too vague to be instructive. Dr. Boggie observes :

"It has, in this country, been denominated Contagious Gangrene, Phagedæna Gangrenosa, Malignant Ulcer, Putrid Ulcer, Sloughing Sore; and by the French writers, Gangrene humide des Hôpitaux, Pourriture d'Hôpital: I shall use the name Hospital Gangrene, as a general term, and point out what I wish to be understood by that of Contagious Gangrene and Phagedæna Gangrenosa." 2.

Although it is not confined to any particular situation, its most aggravated forms are witnessed in hospital practice, from the more concentrated and active character of its exciting causes; and whenever it appears in such unfavourable situations, the ravages it occasions are seldom equalled by any other local disease. When a wound or ulcer is seized with Dr. Boggie's first description of hospital gangrene—contagious gangrene, its sensibility is much increased, its healthy aspect gradually disappears, the granulations grow indistinct and flabby, vesicles sometimes form, purulent secretion ceases, and its surface becomes coated with a viscid brown crust. This coating soon cracks, and gives exit to a thin offensive ichor; an erysipelatous blush creeps over the sore, and often extends for a considerable way around it, the glands in its vicinity become tender and inflamed, the general surface is warm, the pulse quick and strong, the tongue furred, the bowels slow, and the patient is parched with constant thirst.

After the continuance of these symptoms for some time, the inflammation and fever gradually subside, or, becoming much aggravated, usher in the last stage, when blood generally begins to ooze from the sore, sphacelus takes place to a greater or less degree, the pulse sinks, the face becomes cadaverous, the sweat of death breaks upon the surface, and diarrhœa coming on quickly terminates the scene.

But, while this is the ordinary train of symptoms, the fever sometimes assumes a less phlogistic aspect.

"It has been often observed to partake more of a typhoid type; and it is of the utmost consequence in practice to attend to this distinction, as it will be found, that what would be a valuable remedy in the one case, might, if carried to any extent, be very pernicious in the other. The not attending sufficiently to this circumstance, that is, to the phlogistic or typhoid type of the fever, has, I am convinced, often led to fatal mistakes, and seems to be partly, at least, the cause of that great diversity of opinion among medical men regarding the best mode of treating this very dangerous affection." 6.

Dr. Boggie's second, or *phagedænic variety* of gangrene, seldom attacks a recent discontinuity of surface, is less vigorous in its action, and less rapid in its course. Its commencement is usually announced by the appearance of a small dark-coloured ulceration on the edge of the sore, which is, in general, circular, and secretes a matter of peculiar smell. Other ulcerated patches soon appear, and, spreading slowly over the wounded surface, unite, and often kindle such constitutional irritation, as accelerates the progress of the local disease. The discharge becomes bloody and fetid, the ulceration often creeps over the margin of the sore, sphacelus not unfrequently occurs, and the patient before death is sometimes doomed to suffer the concluding stage of the preceding and more acute form of the disease.

Dr. Boggie's division of hospital gangrene into contagious and phagedænic gangrene seems rather objectionable. In a subsequent passage, the Doctor acknowledges the contagious nature of this disease, and, in a preceding extract, we have shown that hospital gangrene is used by him as a

general term, under which he delineates these two varieties. But, if the general disease be contagious, every species of that disease must be contagious; otherwise a genus may contain species which are destitute of the generic character, and species may exhibit properties and symptoms which do not enter into the constitution of the genus. To divide a disease, therefore, in itself contagious, into two varieties, one of which is distinguished from the other by this contagious property, is a *constructive refusal* of this property to the second variety, and is the appropriation of a generic or common symptom to an individual modification of the disease.

In mild cases of hospital gangrene, the parts chiefly involved are the skin and cellular membrane, but in more inveterate varieties, all the subjacent textures are successively attacked, so that, the soft parts being removed by sloughing, the bones are exposed, and often die.

"A great peculiarity in the phagedenic form of the disease is, that different actions, such as the ulcerating, suppurating, and cicatrising, may frequently be seen going on in one sore at the same time." 9.

Artery resists more successfully the ravages of gangrene than any other texture, yet it seldom happens that the secretions are unmixed with blood, and death has occasionally arisen from profuse and repeated hæmorrhage. "We have been obliged," says Delpech, (*Mem. sur la Pourriture d'Hôpital*, p. 22) to throw a ligature around the axillary artery, from an accident of this nature, which had involved the superior part of the humerus; and, on another occasion, a similar affection, which was accompanied by frightful disease of the entire arm, put me to the necessity of amputating the member." Specific sores are less obnoxious to gangrene than any other solutions of continuity; yet, that they are not always exempt, Dr. Hennen furnishes us with a very remarkable proof in the case of a soldier, who was sent into the hospital at Bilboa, with an open bubo in the groin which was almost instantly seized with gangrene, and who survived its attack only 48 hours.

Our author is very full on the causes of hospital gangrene, which he arranges under seven heads, and on the principal of which we will make a few observations.

It will be generally admitted that a fresh and uncrowded atmosphere conduces much to the preservation of health and removal of disease; but why close and ill-ventilated apartments favour the appearance of this peculiar affection, it is not easy to explain. It is seldom seen in hospitals, when the wards are thinly occupied and freely ventilated, and, when it does appear, it is seldom fatal, and seldom spreads; but in crowded apartments, and unhealthy districts, it is frequently met with, and proves, in general, severe. In such cases, the air is impure, and unable to impart that vital property to the blood, which is essential to health, and conducive to the cure of malignant ulcers. But, we apprehend that a contaminated atmosphere does not always act upon the sore through the medium of the system, but directly upon the sore itself. Many modern experiments have shown the power which different gases exert upon malignant ulcers, and we think there can be no doubt, that the qualities of the external air will materially influence their course and condition. The noxious particles with which it is adulterated may act immediately as a poison upon the abraded surface, and, by being taken up by the absorbents, may blight the sore by contaminating the constitution.

But, in crowded ships, hospitals, and other receptacles of disease, the

air is not only injurious from its impurity, it is insalubrious from its increased temperature.

"It is well known that in hot climates, in addition to the general excitement of the system, all the secretions and excretions are more acrid, and, in a very particular manner, the secretion from sores, which is both very abundant and extremely irritating. During the prevalence of the gangrene at Bilboa, and when it was at its very height of malignancy, of which so animated an account is given by Dr. Hennen, in his Principles of Military Surgery, p. 210, *et seq.*, the thermometer in the shade seldom stood below 75° of Fahrenheit, and often much higher. In the wards of the hospital I have seen it at 85°, and in the sun upwards of 120°, indeed I know of no exception to this fact of hospital gangrene prevailing most in hot weather, for I have constantly found, that, in the warm months, the disease raged in its greatest virulence. I am, therefore, inclined to consider a greatly heated atmosphere to be one of the most powerfully exciting causes of this disease." 13.

Inattention to cleanliness is another very frequent cause of hospital gangrene. When the secretions of a sore are not carefully and regularly removed, they soon become acrid stimuli, both to the secreting surface and the surrounding texture; aggravate or induce inflammation, and favour the extension of the original disease. Dr. Boggie believes that its introduction into the Artillery hospital, at Woolwich, is only to be accounted for on this principle; and, indeed, Dr. Rollo admits, that very little care was taken of the wounds, from the singular conviction, that to wash them was superfluous, if it did not tend to increase the mischief.

Upon the same principle acrid applications have been occasionally suspected as the predisposing, or exciting cause of this disease. When ointments are largely used and irregularly renewed, they lose their mild and soothing properties, become rancid and irritating, and impede the cure which they were intended to effect. They have certainly been much too indiscriminately employed, and the success with which wounds and ulcers are at present treated, may be partly accounted for by the less frequent and more judicious application of such remedies.

Intemperance in drink and diet, mental and mechanical irritation will, always predispose to, and often produce hospital gangrene. The general character of this disease seems to be inflammatory, and it is only, we presume, when it assails constitutions much impaired by disease or age, that it exhibits a low or typhoid aspect. It is, therefore, obvious that any thing which encourages a phlogistic habit of body, under such circumstances, will add fuel to a complaint generally phlogistic, and nothing can more effectually induce such a habit than intemperance. Dr. Boggie's observations on this subject are so just, and of such importance, that we will not abridge his sentiments by transferring them into our own language.

"From an idea which very generally prevailed, that the accompanying fever was typhus, and that hospital gangrene could not be prevented, or successfully treated, unless by stimulants, antiseptics, and tonics, a liberal allowance of wine was made to every patient as a preventive; and, when the disease actually appeared, it was then prescribed in increased quantity as a cure; the consequence of which was, a fatal termination in almost every case." 19.

"The fever appeared to me, from the first, to be highly inflammatory, that is immediately after the injury was received, and at the time when the heat of the season was at its maximum; and that it became more mild when the temperature fell, or when the sedative effect of the cold began to be felt; but it was not until the antiphlogistic treatment was fully established, that any remarkable decrease in the mortality took place." 20.

Perhaps there is nothing in the cure of wounds and obstinate ulcers of more importance than bodily rest and mental quiet. The irritation caused by motion keeps the diseased parts in a continual state of morbid excitement, nature is interrupted in her ordinary proceedings, and an injury which was at first trifling and promised well, gives rise to a severe and protracted illness, which at last too often terminates in death.

"I shall never forget the appalling spectacles I beheld in the unfortunate men who effected their escape from Talavera; though the wounds of many of them were but slight, and, no doubt, would have soon got well had they remained at rest, and on the antiphlogistic regimen; yet, after a few days, in consequence of the motion, and other irritating causes to which they were subjected, they were to be seen in all stages of the disease, from the state of incipient inflammation, to that of gangrene, and even sphacelus, and loathsome from the quantity of maggots with which they were infested; and, in those men who arrived at Bilboa from Vittoria, many of them were in an equally bad state; whole limbs were to be seen, almost entirely deprived of vitality, nearly dropping off, and a prey also to vermin, which seemed actually to be devouring them." 30.

Whether hospital gangrene was ever propagated by contagion was once a disputed and doubtful question. But, since the days of Trotter, no author of distinction has adopted his doctrines, and it is now very generally believed that the disorder is both contagious and infectious. Whilst Dr. Boggie, however, ranges himself among the Contagionists, he believes that more ought to be ascribed, during the epidemic spread of hospital gangrene, to the continuance and continued operation of the causes which first gave birth to it, than to any contagious power which it may possess; for it has sometimes occurred to him that—

"Although all the means which are usually employed for the extinction of contagion were had recourse to, such as fumigations of nitric and muriatic acid gases, ventilation, separation, nothing appeared to have the least effect in moderating the violence of the disease, till the antiphlogistic regimen was established." 25.

The principal facts in favour of its contagious nature are furnished us by Dr. J. Thomson, who has given in his *Lectures on Inflammation*, one of the fullest and most perfect descriptions of the disease; and, as they are very concisely stated, for the information of those who may not have access to his valuable works, we will, no doubt, be excused for inserting them.

"The contagious nature of hospital gangrene appears to me to be sufficiently proved, 1st. By the fact that it may be communicated by sponges, charpie, bandages and clothing, to persons at a distance from those infected with it; 2ndly. By its having been observed to attack the slight wounds of surgeons, or their mates, who were employed in dressing infected persons; and that even in circumstances where the medical men so employed did not live in the same apartment with the infected. 3dly. By our being able often to trace its progress distinctly from a single individual through a succession of patients. 4thly. By its attacking recent wounds as well as old sores, and that in a short time after they are brought near to a patient affected with the disease. 5thly. By our being able to prevent the progress of disease in particular situations, by removing the infected person before the contagion which his sores emit has had time to operate. 6thly. By its continuing long in one particular ward of an hospital, or in one particular ship, without appearing in other wards or ships, if pains be taken to prevent intercourse between the infected and uninfected." P. 484.

We have now enumerated what our author considers the most frequent and active causes of hospital gangrene, and a moment's reflection upon their character will convince us, that they are generally such as either di-

rectly produce, or materially favour inflammation. Most of them being active stimuli, will directly augment the action of the texture to which they are applied. Such are heat, irritating medicaments, motion, neglected secretions, and mental excitement. Polluted air and contagion, may, probably, produce an opposite effect, or act as sedatives upon the sore, through the general system, or, immediately upon the sore itself. And thus can we very reasonably account for the two opposite characters which this disease occasionally assumes, and satisfactorily reconcile the different views which writers of equal acumen and experience have maintained respecting it. By some it has been deemed atonic and treated with stimulants; by others it has been regarded as inflammatory. Now, we believe, that both are equally correct, if we only attach a partial signification to their views. When we consider the principal causes of this disease, the symptoms of its first stage, and the remedies usually effective, there can be little doubt that hospital gangrene is, in the majority of instances, essentially inflammatory. But we are equally certain that it may appear, under peculiar circumstances, with very different features, and may, therefore, require a very different plan of management.

An attentive consideration of the causes of hospital gangrene will likewise assist in solving another question which has been much agitated;—in what relation do the local and constitutional symptoms stand, with a reference to their order of succession? Are the local symptoms first developed, and is the system subsequently involved; or does the constitutional disturbance give rise to the local disease? If gangrene succeed a cause purely local, such as irritating applications and mechanical disturbance, the systematic affection must be consecutive; but, if the attack can be traced to a defiled atmosphere, depressing passions, contagious miasmata, or such general causes as may operate primarily upon the constitution, we have then reason to conclude, that the general disorder is not the consequence, but the cause of the topical symptoms.

There cannot be much difficulty in drawing our diagnosis of a disease so prominently characterized.

"There is a species of gangrene complicated with a violent remittent fever, like the yellow fever, which may be mistaken for Hospital Gangrene, but is very different. It attacks wounded men, particularly after undergoing amputation, and has proved fatal I think in almost every instance that I have seen. The gangrene in this case appears to be symptomatic of the constitutional derangement." 47.

Larrey reports that it occurred very frequently after operations during the campaign in Egypt, and Dr. Hennen, in his *Work on Military Surgery*, has given a particular account of it. To state a few of its leading signs will be sufficient to distinguish it from the present affection. Some hours after the operation, it is ushered in with symptoms very similar to those of yellow fever;—rigor, succeeded by heat and perspiration, which follow each other at intervals of five or six hours—the skin soon becomes yellow, gangrenous spots soon appear upon the stump, and, coma coming on, the patient dies on the first or second day of the complaint. In addition to this disease, scorbutic ulcers are, perhaps, the only sores with which it can be confounded. But the absence, in Hospital Gangrene, of the general symptoms of scurvy, the presence of fever, the indifference which it manifests, in its selection of subjects, to the freshness or saltiness of their provisions, and the inefficacy of a vegetable diet to remove it, are sufficient to constitute a line of demarcation between the two diseases.

"The prognosis in this disease, as in most others, must depend on circumstances.

"If the patient is young and healthy, of temperate habits, and the accompanying fever inflammatory, even although the affection should be pretty severe, the prognosis, I think, may be favourable; but, on the contrary, if the patient is old, addicted to intemperance, his health bad, and particularly, if the gangrene should be complicated with fractures of the bones, or a scorbutic diathesis be present, with a fever evidently typhoid, it must be very unfavourable." 32.

In consequence of the double series of symptoms in hospital gangrene, its treatment must, in general, be both constitutional and local, for, whether the sores have infected the constitution, or the constitution the sores, the topical affection, if neglected, will aggravate the general disturbance, and the general disturbance, if unattended to, will increase the local disease. In some cases, it is true, the attack is so mild, that the system may scarcely be said to sympathize, and, in such instances, our local remedies may alone affect a cure; but it is prudent to watch every avenue to danger, since, by proper precautions, we may frequently prevent what it might be found difficult to cure.

In young subjects, and those hitherto strong and healthy, Dr. B. has found the accompanying fever almost always inflammatory, requiring blood-letting, in proportion to its violence and the strength of the patient.

"No precise rule can be laid down regarding the quantity to be taken; but in severe cases I have had occasion to take one, two, three, or even four pounds of blood before the inflammatory symptoms were subdued. In men, however, of a less robust constitution, who may have lingered long in hospital, or suffered much from ill health, we must act with the greatest caution. Bloodletting in such, is either altogether inadmissible, or should be used very sparingly. The same may be said of those who are the subjects of Hospital Gangrene in civil hospitals. They are for the most part poor people, worn out with age, or whose constitutions have been broken by poverty and hard labour; in such the disease assumes a different character, and will require a corresponding treatment." 34.

Some have objected to the employment of the lancet, through fear of the punctures becoming gangrenous; but the Doctor has never seen a single instance of gangrene supervene upon the operation. Indeed, if blood-letting be had recourse to when blood-letting is required, we can scarcely conceive that such a consequence will often follow. It will generally occur, when the accompanying fever is typhoid, and the vital powers low; but, in such instances, the lancet is an improper remedy, and the danger of its employment will not mainly consist, we apprehend, in any symptoms that may arise from the puncture, but in the detraction of a fluid which was necessary to life. But others oppose venesection on a more important ground. They advocate the adynamic nature of the disease, and, consequently, their principal remedies are bark and opium, camphor, ammonia, and wine. If they ever extract blood, it is locally, or in trifling quantities. Such contrariety of principles and practice we have already accounted for, and, while we maintain the value of depletion under proper restrictions, we know of no author, so blind to symptoms and to circumstances, as to advocate the lancet indiscriminately and without distinction.

"It has already been said, that, in that form of Hospital Gangrene named Phagedæna, very great destruction of parts may sometimes take place, without the constitution being much affected by it. Now, if blood-letting is used in such a case, or even in the advanced stage of the true inflammatory gangrene, when disorganization has taken place, and the system is sinking under the consequent debility, the vital powers being nearly exhausted, the result must be obvious; but when it is used with caution, and in cases where it is really applicable, it will be found, I doubt not, to be a most valuable remedy." 36.

In importance, cathartics are only second to blood-letting, and may frequently be administered when the latter cannot be employed. If the pa-

tient have been long confined, or of a weakened habit, if the symptoms be of an inflammatory character, yet if the pulse be weak and easily compressed, brisk and repeated purging will sufficiently lessen the unnatural excitement, and, in those instances in which the fever is not purely phlogistic, but exhibits a mixed and undecided character, purgatives will prove the most useful, because the safest evacuants.

Ponteau has warmly advocated the importance of emetics in this disease, but they are, unquestionably, much inferior to cathartics, by being less generally applicable. When the chylopoietic organs are undisturbed, the object to be gained by giving an emetic is not very obvious. If the symptoms be inflammatory, venesection and cathartics will make a much more permanent impression on the disease, and, if they be asthenic, emetics will be more likely to augment debility than afford relief.

"The cases to which they are chiefly applicable, are those where the stomach is loaded, and where the fever appears to be of a bilious character. This was the case in not a few which I saw at Bilbao; the gangrene being complicated with a fever of that kind, and sometimes supervening to it. Emetics in nauseating doses, were often tried in such instances, and were considered useful, both by their operation as evacuants, and by the nausea which they excited, lowering the action of the vascular system. In the same cases, antimonials and saline diaphoretics will be found very useful." 37.

Every stimulating medicine is reprobated by our author in the first stage of this disease. Bark, opium, camphor, and wine, are well known excitants, and if hospital gangrene merits and meets the character we have drawn of it, stimuli must not be exhibited until inflammatory symptoms have subsided, and the disease have put on a more mild or chronic aspect. Let not this observation, however, be regarded as a rule. There may be and are many instances, in which strengthening regimen and tonic remedies will be required from the first, and wherein the application of phlogistic measures would be hazardous, if not destructive. When the fever is from the beginning decidedly typhoid, when the patient is exhausted by protracted illness, or worn down by age, or when the irritation of the local disease is undermining the constitution, any of the above medicines may be given, and all may be necessary.

It is only when the patient is robust and the symptoms are inflammatory, when the pulse is strong and the heat is great, when foulness of tongue, loss of appetite, thirst, and watchfulness, announce the existence of no ordinary excitement, that all such stimulating medicines ought to be avoided. In obedience to the same views, the diet should be frugal, mild cooling diluents should be employed for drink; and the apartments of the sick should be freely ventilated. Some have recommended cold affusion, but as its sedative effects are soon removed by re-action, unless it be long continued, there may be some danger of its ultimately aggravating the disease. Sponging with tepid water is, perhaps, as soothing, and is a less doubtful application.

The Doctor has overlooked the mineral and vegetable acids in his list of general medicines, and, since they are not liable to the same objections with bark and wine, but may be used with equal safety in both forms of the disease, we deem the omission as of some importance. The sulphuric acid is most usually employed, but the oxymuriatic, citric, and tartaric acids, may be given with advantage, and their efficacy is, generally, the greater when the dose is considerable.

As to the treatment which should be pursued with a reference to the local symptoms, many plans have been proposed, and many remedies recommended. Indeed, the French esteem constitutional treatment nugatory, and look exclusively to local remedies for a cure. Delpech is particularly

urgent on this side. He says that he had witnessed this disease during three destructive epidemics; that, from the facts then noticed, he became convinced that it was a purely local affection, arising from a local contagion; that all the attempts which were made to arrest its progress by constitutional treatment proved unavailing, and that topical remedies alone were found of use. But if it be essentially the result of contagion, is not contagion a general cause, and will it not act upon the general system? Delpech, to be consistent, believes that it only operates upon the surface of the sore, and that this circumstance accounts for the success of the actual cautery, which burns away the infected substance, and thus extinguishes the disease. But we know of no such local contagion, or infectious principle. The poison of the rattle-snake, or of a rabid animal, and the venereal, or small-pox virus, are purely local in their primary action, as local, assuredly, as the contagious matter of hospital gangrene; yet, the effects which they produce are not limited to the surface to which they were applied, and the medicines best calculated to remove these effects, are not such as are endowed with local virtues.

Many cases, we believe, from the nature of the causes producing them, are originally constitutional, ultimately involving the topical injury; and, to treat such cases locally, we apprehend, were just as judicious as would be our treatment in inoculated small-pox, if we confined our attention to the punctures of the lancet, or to the dressings of the pustules.

Our author arranges his topical applications into three classes; viz. sedatives, escharotics, and stimulants. Sedatives are best adapted to the first stage, and, perhaps, the application of cold will be found as effectual in alleviating, as it is in preventing the disease. For this purpose, cloths, moist with cold water, should be kept constantly applied; and, to increase their effect, artificial means may be had recourse to, to lower still further their temperature.

Poultices are very doubtful remedies in the first stage. If warm, they are stimulating and generally hurtful, and, if cold, the heat of the parts will soon make them warm. They are also objectionable on account of their weight. When the inflammatory symptoms have subsided, however, and when the sloughs are not disposed to separate, they may be often useful, accompanied with warm fomentations. Under such circumstances stimulants are necessary. Diluted, or concentrated acids, nitrate of silver, oil of turpentine, caustic potash, the arsenical solution, and actual cautery, may be advantageously applied. These should be assisted by a more generous diet, and small quantities of wine. But the greatest caution is required in the use of stimuli, since excess, even to a small extent, will seldom fail to occasion a relapse, which is infinitely more dangerous than the first attack. When the sloughs separate, healthy secretion is established, and florid granulations rise, the wound should be dressed with dry lint, over which a pledget of mild ointment may be supported by a compress and roller. If the dressings be not regularly renewed, the discharge becomes acrid, irritates the healing surface, and retards the cure. The granulations get weak and inactive, and the phagadenic variety will be soon established.

This second form of hospital gangrene is of a more local nature than the first, and, if timely treated, may in general be arrested by local remedies: the most efficacious of which are the escharotics above enumerated.

The *argentum nitratum* and *oxyd. hyd. rubr.* are those which the Doctor has chiefly employed, but Mr. Welbank strongly recommends nitric acid, which is the application principally employed in St. Bartholomew's Hospital since the publication of his paper; Mr. Blackadder believes that the

arsenical solution will cure almost every variety; and Dr. Rollo reports that the oxygenated muriatic acid was made use of in the Artillery Hospital of Woolwich with great success.

Speaking of the arsenical solution, the Dr. observes—

“At the time when this disease raged with so much violence at Bilboa, I had not heard of that remedy; and when I was made acquainted with it, the malady had abated so much and was so manageable by the means then in use, that it was not thought necessary to have recourse to any other, and since that time I have had no opportunity of putting it to the test. That it is a valuable remedy in certain states of the disease, there cannot, I think, be a doubt: but that it will succeed in all, and without the assistance of general remedies, remains, I conceive, yet to be proved.” 46.

The actual cautery, however, is the “magnum remedium” in France. Dupuytren seldom uses any other, with the exception of the lancet; and Delpsch observes, that in his practice nothing equalled the prompt and invariable success attending it; a single application being, for the most part, sufficient, when the iron could be carried over every point of the diseased surface. It seems, however, to be too rough an application for British nerves, and, although many of our objections against its employment may be ascribed to prejudice rather than to reason, there is no immediate probability of its gaining that ascendancy in the therapeutics of England, which it enjoys in those of France. When milder measures are equally successful, it is worse than useless to add the frightfulness of terror to the pungency of pain, and to increase actual misery with useless fears.

“It has been said, that, in Hospital Gangrene, when all other means fail, amputation may be performed with success, and even at a time when the gangrene is extending.

“There is one form of Hospital Gangrene, which appears to be entirely local, at least, in the commencement; and I have sometimes seen very great destruction done by it, without the constitution being much affected, viz. the phagedenic form of the disease in which I have no doubt but that the operation may be performed, and without any risk of the disease returning, or affecting the stump; but in the other form of the disease, which has been named Contagious Gangrene, in which there is always inflammation to a greater or less degree with fever, I consider such practice to be extremely dangerous, and contrary to all the rules which have ever been laid down on this subject.

“The operation, in my opinion, should never be thought of, until the fever and inflammation abate, and then, in all probability, the progress of the gangrene will be found to be stopped.” 49.

In that species of gangrene which is complicated with remittent fever, and to which we have alluded when speaking of the diagnosis, every mode of treatment hitherto tried has proved equally unavailing; death taking place in little more than 36 hours after the accession of the fever.

“It appeared to me most advisable, after prescribing an emetic, and cathartic, to support the strength of the patients as long as possible. With this view, bark was ordered, with wine and other cordials, and the stumps were dressed with a powder composed of myrrh, bark, and camphor, which I have sometimes applied with advantage to mortified parts: but nothing was of any avail; they all sunk in the short space of time already mentioned.” 49.

Dr. Boggie's very valuable and instructive Essay concludes with three tabular views, illustrating the results of different modes of treatment, and confirming the orthodoxy of the preceding doctrine. While stimulants were exhibited the proportion of deaths to diseases treated was 1 to 15; but when antiphlogistic measures were adopted, the proportion diminished to 1 to 34, and, so soon as they were exclusively followed, the mortality decreased to 1 in 132. But such successful results are not always to be expected from the most judicious measures. The experience of other writers entertaining the same views with Dr. Boggie, has furnished us with

very different bills of mortality; and we doubt not that, while some attacks have been less destructive than others, we should, in our general deductions, study the character of the epidemic, in estimating the success of its treatment.

In a paper of such circumscribed limits, it was impossible to introduce every point and discuss every question, which attaches to a subject of so much practical interest as Hospital Gangrene; many particulars have been, consequently, overlooked, and some have been imperfectly noticed; but the topics, which the author has considered it proper to enlarge upon, have received justice, and, in the course of our observations, we have occasionally endeavoured to supply the blanks with important extracts and original remarks.

VI.

Memoir on Visceral Neuralgia. By P. JOLLY, M. D.

MUCH has been written on that class of painful maladies, the neuralgiæ of the nerves of relation—and, under the class *neuroses*, many diseases, or rather symptoms, connected with, or dependent on visceral neuralgia, have been accurately described, as for example, angina pectoris, spasmodic asthma, hooping-cough, &c. Few or no investigations, however, have been made into the state of the visceral nerves themselves, on which the disorders of function in these viscera, so often depend. The general sentiment, indeed, appears to be that, in the *neuroses*, there is a total absence of appreciable change of structure, or, in other words, of physical lesion, in the parts affected. Our author thinks, on the contrary, that there are very few of the *neuroses*, whether external or internal, in which some lesion might not be detected either in one of the principal nerves, their divisions, their anastomoses, or in one of the great nervous centres. The researches of Bichat, Beclard, Swan, and others, on the local affections of nerves, justifies him in this opinion, as far as the nerves of relation are concerned. These researches have reduced the number of vague terms in medicine, and augmented the number of those which have some anatomical and physiological meaning. But we have not been so successful in our researches respecting the visceral or ganglionic nerves. All there is darkness; and we have hardly ventured to apply the term *neuralgia*—probably because the idea of great pain is associated with the word; whereas, the splanchnic nerves, having specific kinds of sensibility, may suffer severely in their own way, and greatly disorder the functions of the organs on which they are distributed, without any sensible pain, in the common acceptation of the word.

M. Jolly employs the term NEURALGIA, then to designate every lesion, physical or vital, direct or indirect, of a nerve, unaccompanied by external signs of inflammation—assuming, for the most part, a periodical character—and disturbing, more or less, the functions of the corresponding viscera. He reserves the term “NEUROSSES,” on the other hand, for all those nervous affections where no local cause can be traced in the nerve, but merely disorder of function in the organ. Our author properly observes that, between the cerebrospinal nerves (the nerves of relation with the outward world) and the ganglionic nerves arising from the solar plexus, there is an intermediate class (the phrenic and eighth pair) which partake of the characters and functions of both the others—and whose disorders are modified accordingly. It is with this class of nerves that our author commences his history of the neuralgiæ of the nutritive life—or the function of digestion and assimilation.

PHRENIC NEURALGIE.

Clinical Characters. The phrenic neuralgiæ, like most nervous disorders, are generally intermittent. They manifest themselves by more or less of pain, accompanied by a sense of constriction about the epigastrium or in the back—by hiccup, often attended with eructations, vomiting, and other symptoms denoting a spasmodic affection of the diaphragm. They may also give rise to disorder, more or less marked, of the respiratory apparatus, and thus simulate all the phenomena of asthma. They are usually unattended with pyrexia; but, in some cases, they are accompanied by all the general symptoms of intermittent fever, simple or malignant.

EXAMPLES.

Case 1. In the 5th volume of the Medical Journal of Vandermonde, M. Hazou has published a case of painful intermittent hiccup, which illustrates this subject. A lady, 30 years of age, received some melancholy news while menstruating, and by which the catamenial discharge was stopped. On this suppression, there supervened a most distressing hiccup, which lasted with great violence for 36 hours. There was then an intermission of 24 hours, when the hiccup returned with the same degree of intensity, and lasted the same number of hours. The complaint went on in this manner, the periods of attack and intermission as above, for several weeks, by which the patient was nearly brought to the grave. She was cured at last, by a course of strong purgative medicine.

Case 2. This case is published by M. Bigot, in the 92d number of the "CLINIQUE DES HÔPITAUX." Madeline Rabouin, aged 24 years, had been subject to occasional attacks of hiccup for five years, which generally lasted a few hours, and then ceased. During the last six months, the hiccup has seldom appeared, but it has been superseded by attacks of aphonia so complete as to render her incapable, for the time, of uttering a single sound. M. Bigot was consulted, and found that this young woman was not regular in her catamenia, and that she complained of pain in the back part of her head. She was directed to apply 15 leeches to the anus, and to encourage the discharge. By this remedy the aphonia was renewed; but it was replaced by the periodical attacks of hiccup, which were infinitely more distressing than the aphonia. A tartar-emetical plaster was applied to the epigastrium, which brought out a plentiful crop of pustules, and these were kept in a state of irritation and discharge by fresh applications of the antimonial. This put an end to the singultus for 12 days, when it returned. A second plaster completely dissipated the complaint.

Case 3. (HOSPITAL PRACTICE.) Miss Mason, aged 27 years, of delicate constitution, and of great susceptibility of nerve, had been subject to indigestion since the age of 20, but was regular in her menstrual evacuations. Seven months prior to the date of report, she was, without any apparent cause, seized with a rigor, which lasted several hours, accompanied by loud and quickly repeated discharges of flatus from the stomach. These eructations continued, with more or less intensity from that period, the patient being seldom more than an hour without them. In this state she presented herself to M. Dupuytren, at the Hôtel Dieu under a severe paroxysm, the head being bent forward on the chest, while the sterno-cleido, pectoral, and several other muscles, as well as the diaphragm, were constantly agitated by convulsive movements. The eructations were unattended with pain; but when the paroxysms lasted any considerable time, she appeared to be threatened with suffocation. She was greatly emaciated, but preserved her appetite, and had some sleep at night. M. Dupuytren resorted at once to a powerful remedy—the actual cautery.

Two irons of two inches in diameter, and of a white heat, were held successively, close to the pit of the stomach, till the integuments became of a deep red colour. The cries of the patient who was firmly held by assistants, were dreadful, and she sunk, at last, into a kind of stupor, and all spasmodic action ceased. On recovering, she was conveyed home, and, in the evening, she was at her usual occupations, and in good spirits. For some days after this, she had but very slight attacks, and when the report closed she was nearly well.

Case 4. (HÔTEL DIEU.—M. DUPUYTREN.) This was a female also, of irregular menstruation, who had been harrassed for two years, with a most distressing singultus, accompanied by spasmodic action of the pectoral and cervical muscles. M. Dupuytren employed the actual cautery in the same manner as in the preceding case. The skin was disorganized, but the singultus was stopped as by a charm. Fifteen days afterwards she returned to the hospital, and reported that the hiccup was now so mild that it caused her very little inconvenience.

Several authors have related cases of intermittent hiccup, accompanied with pain, more or less acute, in those organs, under the influence of the phrenic nerve, and which only gave way to large doses of the cinchona. These phrenic neuralgiæ, like all others of that class, may be accompanied by fever—and are then, in fact, intermittents. We have little doubt that they arise from the same causes that produce agues.

Anatomical Characters These are very little known, as the subject has not been prosecuted to any extent. Our author has little doubt that a physical change in the nerve, or its neurilema, (probably of an inflammatory character,) takes place. We find an instance recorded by the elder Berard, in the case of an individual who had presented all the symptoms of asthma. On dissection no other physical change could be discovered than a small tubercle, the size of a pea, of a black colour, and extremely hard, which had completely interrupted the phrenic nerve on one side. It is certain, however, that neuralgia exists entirely independent of local lesion, and which appears to result from, and to be kept up by a vicious habit of the vital powers or properties of the nerve itself. Such would appear to be the case in the two instances related by M. Rigot, from the hospital practice of Dupuytren, and which would, probably, have given way to bark or arsenic, as well as to the actual cautery. Still it must be confessed, that the nerves have been but little examined in the neuroses and neuralgiæ, and it is, therefore, to be hoped, that future researches into the intimate texture of parts, will detect many lesions now unknown. Till then we must trust to external symptoms.

PNEUMO-GASTRIC NEURALGIÆ.

Clinical Characters. These neuralgiæ are infinitely more common than is suspected. It is to these, in fact, that we are to attribute the greater number of periodical or spasmodic asthmas, dyspnœas, periodical coughs, hooping coughs, and what have been called "nervous vomitings," by different writers. It is in this class we must place the "tussis suffocativa," quotidian, tertian, &c. of Galleazzi, Ridley, Home, Stork, and others. In this class must be located the periodical vomitings with epigastric pain, cited by Heister, and many other authors.

Those hemicranîæ that are so distressing and obstinate are probably referrible to this class of neuralgiæ, although *sympathetic* in respect to the immediate nervous seat of the pain. We shall select and condense a few cases illustrative of this class of visceral neuralgiæ.

Case 5. (M. DUMERIL—MAISON ROYALE.) A female cook, aged about 30 years, had been subject, for several years, to hemicranîæ, which attack-

ed her many times in a month. They were ushered in by chillness, succeeded by re-action, agitation, sense of strangulation, and, lastly, by sickness and vomiting. She was cured by anodynes and evacuants, followed by tonics.

Case 6.—(Same Establishment.) A female, aged 39 years, had been harassed for some time with paroxysms of cough resembling whooping-cough. It generally came on every evening, especially after eating. To the paroxysms of coughing was added vomiting, with dreadful straining and convulsive agitation. She had been treated by leechings, purgings, diluents, and other means, when having entered the *Maison Royale*, M. Dumeril wisely considered the case as one of nervous periodical affection, and soon cured her by anodynes and tonics.

Case 7.—In a former number of the *Bibliothèque Medicale*, M. Jolly had published a case which shewed the difficulty of diagnosis, while it tends to corroborate the opinion of M. Fodera, that asthma is often dependent on a certain morbid condition of the brain and nerves. An individual had experienced, during several years, a train of anomalous symptoms in the vascular and respiratory apparatus, which led his physicians to suspect serious organic disease of the chest. On the least exertion of body or emotion of mind, he was threatened with suffocation, had violent palpitation of the heart, irregularity of the pulse, indigestion, apparent enlargement and pain in the liver. Bleeding and starvation did not mitigate the disease, while it seemed to accelerate general dropsy, of which he died. The most accurate examination after death, did not detect any deviation from healthy structure in the chest; and the only morbid anatomy that was found, consisted in a softening and vascularity about the corpora olivaria, near the origin of the par vagum.

Anatomical Characters. These, like the other neuralgiæ, may leave no cognizable trace of their existence in the nerves affected. This, indeed, is the case ninety-nine times in the hundred. Pathological anatomy, however, is not without examples of physical changes in the pneumo-gastric nerves, corresponding with the symptoms during life. Thus Autenrieth found the par vagum and phrenic inflamed in individuals who had died of spasmodic cough, resisting every kind of treatment. M. Breschet discovered the pneumo-gastric nerves of a yellow colour in people who had died of whooping-cough. Andral has related a remarkable case of asthma where the par vagum was altered in structure. Gondrin, Cruvelhier, and others, have also reported analogous cases.

It is to be remembered, however, that physical lesions in the nerves are rare when compared with disordered function, and this will apply to all other textures of the body as well as to the nerves. We are bound, therefore, to conclude that the physical change is one that takes place as a consequence, in general, of the functional disorder, though that consequence must, in its turn, prove a cause or an exasperation of the disorder.

But what we would wish particularly to impress on the minds of our younger brethren is the utility of attending to these visceral neuralgiæ, and especially to the periodical forms which they assume, leading us to trace them to the same general causes which produce the tribe of agues and remittent complaints—namely, miasmatic emanations from the earth. It is on this supposition, that we can comprehend the alleviation which a trifling change of place and air will frequently produce in this class of complaints, while it explains the reason why some people cannot maintain a day's good health in certain localities. An attention to the medical topography of the place may often lead to a knowledge of the cause—and a knowledge of the cause is the surest key not only to prevention but to cure.

VII.

Researches into the Causes, Nature, and Treatment of the Diseases of India, and of Warm Climates generally. By JAMES ANNESLEY, Esq. &c.

[ART. II.—ACUTE HEPATITIS.]

In a former article, (No. XVI. p. 409, &c.) we presented our readers with an analysis of the first half of Mr. Annesley's first volume on Indian Diseases. We now resume our labours—we may well say *labours*; for it has never been our lot to see valuable matter so diluted, and, comparatively speaking, *lost*, in a deluge of superfluous verbiage, as in these volumes. We understand that the East India Company make the purchase of this work nearly imperative on their medical officers. If so, Mr. Annesley has imposed a *heavy* tax on his Oriental brethren. We do not allude to the FOURTEEN GUINEAS—though that is something to an assistant surgeon on first setting out—but, to the expense and inconvenience of employing a buffalo for the transportation of these volumes from station to station in the East Indies. That “a GREAT BOOK IS A GREAT EVIL,” will be amply verified in this instance, and many a time will “MEGA BIBLION”! be heard, in uncouth dialects, “o’er lofty Ghaut, through lonely glen,” as aspirated by the panting Coolie, while groaning beneath the weight of a—“GREY GOOSE QUILL”! Well might MIRABEAU exclaim, in the National Convention, “WORDS ARE THINGS.” They are indeed—and very *heavy* things sometimes! Had Mr. Annesley been acquainted with the discovery of our friend LACON, and applied the VERBIFUGE to his proof-sheets, he would have *lightened* the labours of many a personage, besides the buffalo and Coolie! But it is now too late, and we can only endeavour to diffuse the materials of these costly and highly valuable volumes in a more *portable* form than the author has thought proper to adopt.

Hepatitis is a word which almost universally, in this country, calls up the idea of a hot climate, and especially the climate of India. There is hardly any acute inflammation less common in Europe than that of the liver—none so frequent as this phlogosis in our Asiatic dependencies. The reasons why hepatitis should prevail more generally in India than England have been discussed, but not finally adjusted. Some place the etiology of the disease to the account of atmospheric heat—some to a specific miasm, peculiar to India—and others to the luxurious living of Anglo-East Indians. It is probable that the same miasm which produces jungle, marsh, and the whole tribe of remittent and intermittent fevers, gives origin also, in many instances, to dysentery cholera, and hepatitis.

Mr. Annesley observes that—“inflammation of the liver generally *supervenes*, either as a *primary* disease, without any very apparent state of previous disorder, or as a consequence of one or more of the functional derangements, &c.” We notice this opening sentence of the section to shew how fond the author is of words, and how little he cares about their mean-

ing. How can hepatitis *supervene* as a *primary* disease? If it *supervenes* at all, it must *supervene* on some other disorder. Even the latter part of the sentence is clumsy, if not incorrect. If inflammation of the liver is a mere *consequence* of functional disorder, the word *supervene* is still an inappropriate one. We seldom indulge in verbal criticisms; but the work under review certainly requires much *verbal* expurgation.

The right lobe of the liver is more frequently inflamed than any other part—the left lobe less frequently. The parenchymatous structure, in Mr. A.'s experience, is much oftener the seat of phlogosis than the coverings of the liver. Frequently, indeed, we find the substance of the liver destroyed by inflammation or abscess, without any appearance of phlogosis on the surface.

"Inflammation of the substance of the liver seldom commences with a well-marked rigor or chill, unless after exposure to a powerful exciting cause operating upon the system from without, as cold or wet, currents of air, night dew, or malaria. When chills or rigors mark commencing inflammation of the internal structure of the organ, there are generally one or more of the symptoms we have enumerated as characterising congestion also present. Indeed, a congested state of the organ about to be diseased always accompanies that particular condition of system which gives rise to rigors, if it does not actually cause this particular phenomenon; and it generally accompanies inflammation of the substance of the organ, to a greater or less extent, throughout its progress. The patient usually complains, about this time, of oppression, weight, and uneasiness about the pit of the stomach and right hypochondrium, extending sometimes under the ensiform cartilage, and in the direction of the diaphragm and mediastinum to the back and shoulder-blades. These symptoms are usually increased upon a full inspiration, taken at the time when pressure is made beneath the ribs, or when pressure upon the stomach and back is made at the same time. The pulse is, at this very early period of the disorder, scarcely affected; but it soon becomes accelerated towards night; it is often slower and more oppressed than usual, and occasionally irregular or remittent. The countenance is now usually pale, sallow, or somewhat anxious; the spirits considerably depressed; the tongue yellowish, white, and more or less foul, and the patient complains of loss of appetite, and of sickness, with an unpleasant taste in his mouth. The bowels are often irregular, but at first, generally costive, and the urine is in small quantity, loaded, and high coloured. There is sometimes headach, and generally a disturbed sleep, and often slight dyspnoea and sighing, with slight oppression at the chest and epigastrium.

"As the disease of the internal structure of the liver advances, the pulse becomes quicker, fuller, and more irritable in its beat during the evening and night, and it is often oppressed and embarrassed during the morning and day, and sometimes throughout, unless copious depletions have been practised early in the disorder; the sense of uneasiness in the region of the liver and epigastrium is often augmented; and if vascular fulness of the organ be great, and particularly when the inflammation results from congestion, the patient complains of a heavy, dragging pain, increased on sudden motion, or by turning suddenly in bed. There is often a short, suppressed cough, dyspnoea, with shortness of breathing, a catch in the respiration, particularly after quick motion. Upon examination, in these cases, tumidity of the viscus may be often ascertained from its protrusion beneath the ribs and scrobiculus cordis. The easiest position is usually upon the back, or sitting gently bent forward. All these symptoms are generally increased upon taking matters into the stomach; and the pulse is now much accelerated, especially towards evening. Difficulty of lying upon the right side is not frequently present, and pain in turning to the left side is not often felt, unless the change of position be made suddenly. The tongue at this stage of the disease is generally coated, and of a yellowish or brown colour; it is frequently also dry, particularly at its middle. The pain sometimes complained of at the top of the right shoulder, and so improperly stated as being one of the chief signs of hepatitis, is, when present, certainly characteristic of the disease in the right lobe; but, unfortunately, this symptom is only occasionally present; and the inexperienced practitioner, who has been taught to look to this as a distinctive mark

of the disease, infers, when it is not observed, that the liver is sound. With respect to the pain actually accompanying inflammation of this organ, we may state that it is often felt in the region of the liver, in the lower part of the thorax, and in the epigastric region: it is sometimes referable to the top of the right shoulder, frequently to the right shoulder-blade, and occasionally to both scapulæ: it is, on some occasions, seated in the back, between the lower angles of the scapulæ, and, in some instances, the only pain which has been complained of, has been in the loins. We have observed it, in a few cases, in the right clavicle and its vicinity: and in others, in the left shoulder and shoulder-blade only. In many cases, pain is increased in the situation of the disease, or its vicinity, upon quick motion, upon making a false step, or upon turning suddenly from one side to the other; and, in a few obscure cases, pain is complained of only on such occasions. When the internal structure of the organ is affected, the pain in the hypochondriac and epigastric regions is seldom acute; there is most frequently a sense of aching or dragging, with oppression at the præcordia. Pain is seldom acute, tensive, or pungent, unless the surfaces or ligaments become affected. There is usually great anxiety at the epigastrium and præcordia, accompanied with frequent sighing, particularly when pressure is made simultaneous on the right hypochondrium and under the right shoulder-blade. We have seen a few cases where pain followed the course of the muscle of the right side of the neck: it often extends from under the ensiform cartilage, in the direction of the mediastinum, to between the shoulder-blades; and when this is observed, oppression, dyspnoea, or a sudden catch in breathing, and a dry cough, generally accompany it. Pain frequently, also, extends from the right side, under the shoulder-blade, to the spine, where it terminates. On many occasions, when great congestion of the vessels of the liver seems to accompany inflammation of its substance—states of the organ which, as we have already said, are frequently co-existent—the right lobe becomes very much enlarged, and rises up into the right cavity of the thorax, occasioning great oppression at the chest, fulness at the epigastric region, dyspnoea, frequent dry cough, and sometimes acute pain, owing to the great distention of the covering of the liver at this part, with an increased discharge of mucus from the bronchi. In such cases, the exacerbation of pain in the chest, upon a full respiration or on coughing, the flushed or tumid state of the countenance, occasioned by the interrupted circulation through the lungs and the seat of the complaint, are apt to make the inexperienced practitioner mistake the disease for pneumonia. In cases of this description there is generally more or less pain or uneasiness felt about the shoulder-blades, or top of the right shoulder, or between the scapulæ; and often numbness of the right arm, with pain about the insertion of the deltoid muscle, or at the wrist, is complained of; rarely, a slight numbness or pain is felt down the right hip.” 419.

Nausea and vomiting are often concomitants of the more acute attacks, and generally indicate that the inflammation is seated near, or is extending to the stomach, or in the direction of the ducts. This more usually happens when the inflammation results from accumulations of vitiated bile.

“In such cases the patient complains of sense of fluttering, weight, and fulness, at the right hypochondriac and epigastric regions,—sometimes of pain in the abdomen,—and he reclines chiefly on the left side; the stools are generally watery, frequent, scanty, and very dark coloured, with tenesmus and many of the symptoms of dysentery, for which disease it is often mistaken. Even when but little sickness at stomach is present, there is always loss of appetite in the more acute forms of the disease, heartburn or gripes about an hour or two after a meal, and considerable thirst, with low spirits; and the patient often reclines upon the back or left side, in preference to any other position.” 419.

As the inflammation advances, the fever, and especially the evening exacerbation, becomes more marked—the tongue is generally covered with a white or yellowish brown fur—moist in the beginning, but dry in the advanced stages. In cases where the hepatitis has supervened on previous disorder of the alimentary canal, or after repeated attacks of hepatic dis-

order, "the tongue seems often smooth and glossy, marked by fissures, and lobulated." These are bad signs. The bowels are generally much disordered—the motions being vitiated, scanty, slimy, watery, or of a dirty brown colour. The thirst is urgent, and the nights are restless.

"The state of the countenance and skin deserves attention during the progress of disorder. At its invasion, particularly when attended with chills or rigors, the countenance is pale or sallow, and the skin shrunk and pale on the extremities, but often natural in the trunk. As the inflammatory action becomes developed, the countenance fills out more fully; and when there is great fulness and oppression in the region of the liver and chest, the face often becomes fuller than natural, with some degree of dusky redness in the cheeks. The countenance and eyes, however, still possess a murky, or muddy, or sallow hue, and more or less of a dark circle surrounds the eye, particularly beneath it. The tunica albuginea is either of a yellow tint, or of a dull white, or pearly hue. The patient often complains of pain in the forehead and over the eyes. The skin on the trunk, especially towards evening, is generally warmer than natural, and is sometimes attended with a greasy feel, and a scanty or partial perspiration. When perspiration is copious, it is frequently very offensive. A certain degree of jaundice is often remarked in the hepatitis of Europe, especially when it terminates in abscess; but jaundice is not a frequent concomitant of hepatitis in India, unless when the ducts or gall-bladder become involved in the disease, or when it supervenes to biliary calculi and obstruction of the ducts. The countenance and eye, are, however, always deficient of clearness, and possess a sickly expression." 421.

The urine is high-coloured, scanty, loaded, and produces a sense of scalding when passed. A dysenteric state of the bowels is a common concomitant—and healthy bile is hardly ever found in the stools. Mr. A. observes, what no practical man will doubt, that there is no *one* symptom or phenomenon on which we can depend, as pathognomonic of active inflammation in the liver—and he might have added, of inflammation in any other internal structure.

When the surface of the liver becomes inflamed, whether primarily or secondarily, the symptoms assume a more acute and definite character.

"Febrile signs are more prominent, and often supervene to slight rigors and chills; the pulse is generally much accelerated, and hard; the pain in the right hypochondrium is more or less acute; and when the upper surface of the right lobe is affected, or when great tumefaction of this part is present, so that it rises up into the chest, considerable pain and tension are also felt in the right thorax and under the ensiform cartilage and sternum, so as to resemble an attack of pleuritis. There is also cough, much increase of pain, or a catch, upon a full inspiration, or upon pressure, especially when made at the time of a full inspiration. When the whole of the upper surface of the organ is the seat of inflammatory action, the attack may be mistaken for pneumonia. The oppression, difficulty of breathing, pain in the course of the diaphragm and under the sternum, being generally considerable." 424.

The heat and dryness of skin and tongue are also greater in the membranous than in the parenchymatous inflammation. The secretions from the bowels are very variable in this form—generally they are diminished in quantity, and sometimes deficient of bile. Diaphragmitis is not unfrequently superinduced in this form of hepatitis, from extension of the inflammation—and the lungs also are not uncommonly inflamed, attended with great tension in the hypochondria and inconvenience in breathing. The cough is hard, frequent, and suppressed as much as possible by the patient. When the outer surface of the right lobe is inflamed, the patient lies best on that side,

and has pain extending round to the right scapula—sometimes to the shoulder. On the other hand, when the concave surface of the organ is the seat of inflammation, the functions of the stomach are prominently disturbed.

“Nausea and vomiting are often present, particularly a few minutes after substances are taken into the stomach. The thirst, anxiety, and pain at the epigastric region, are urgent, and there is usually much pain in the back, and sometimes in the right shoulder and muscles of the right side of the neck. The pulse is variable, but generally irritable, quick, small, contracted, or hard. There is often felt a sense of fluttering at the *scrobiculus cordis*, with a heavy dragging pain in the same situation; anxiety and frequent sighing; and sometimes, in the advanced state of the disease, hiccup is present, especially after cold fluids are taken into the stomach. The patient generally reclines upon the left side, or leans gently forwards. All these symptoms become more urgent if the inflammatory action have extended to the gall-bladder, to the ducts, or to the stomach itself. When such is the case, there is generally a sense of burning felt at the epigastrium, with fulness, frequent and painful eructations of flatus, very quick pulse, with cold, clammy hands, and increased heat of the trunk. The vomiting is frequent and painful, the urine in small quantity, and the stools watery, scanty, and often morbid and offensive. When the ducts and gall-bladder are affected, the pain is felt darting to the right side and back, and from under the ensiform cartilage, in the course of the mediastinum, to the spine; sometimes it extends from the epigastrium to the umbilicus, and back to the right hypochondrium. Singultus and acrid eructations not infrequently also supervene as the disease advances, particularly after substances are taken into the stomach. The patient can seldom bear pressure on the right side and epigastric region, and feels increased uneasiness upon a full inspiration. Increase of uneasiness merely cannot, however, be considered as a distinctive sign of the seat of the inflammation, as this function is more or less affected, particularly on attempts to fill the lungs, in all the stages and forms of the disease: the degree, however, to which the breathing is affected, and the seat of pain or uneasiness, upon taking a full inspiration, is often a guide to the actual state of the disorder. A similar remark may be applied to the pain and uneasiness frequently felt upon making a forced expiration: for this means of ascertaining the seat of pain ought always to be practised, whenever the exact nature of the case is in any way doubtful. There are also observed great restlessness and want of sleep, a foul state of the tongue, with large, foul, and brown papillæ. If the tongue become clean from the treatment, the papillæ generally remain long excited or prominent.” 427.

It is but seldom that the left lobe of the liver is alone inflamed—and indeed it may be said that membranous inflammation is seldom unaccompanied by an extension of the phlogosis, more or less, into the substance of the organ. The symptoms will then, of course, partake of the characters peculiar to both forms.

PATHOLOGICAL APPEARANCES.

Excepting where people die of other diseases, as fever or dysentery, it is seldom that the pathologist has an opportunity of observing the appearances presented by the early stages of hepatitis. When such opportunities do occur, he often finds some part of the surface or interior of the organ evincing the usual signs of phlogosis—vascularity, redness, gelatinous coatings on the surface—increased vascularity, redness, and friability or softness in the recently inflamed *parenchyma*.

“In some instances, the surface of the inflamed organ is variously shaded. Sometimes, it is marked with red, brown, brick-coloured, greenish-brown, and even with almost black spots and streaks, while the internal structure is inflamed, congested with blood, much

tumefied, and softer than natural. Upon making a section of the viscus with a very sharp scalpel, and after wiping with a sponge the cut surfaces, they present a lighter coloured reticulum, or mesh, studded with red or brick-red granula, and the divided ends of blood-vessels and biliary ducts. Upon being torn asunder—which is generally done with more facility in the acutely inflamed state, although sometimes with more difficulty in the chronic conditions of disease—the torn surfaces exude a greater quantity of fluid blood, but still retain their minutely granulated structure, and present both a brighter and a deeper colour than in their healthy state. When abscess forms in the substance of the organ, then the appearances become very materially and very variously altered.” 434.

Gangrene has been remarked by many writers and teachers—but our author, whose opportunities have not been exceeded by any other practitioner, never saw a case of the kind. It is probable that the black congested and softened state above-described, has been mistaken for gangrene. The inflammation and its consequences frequently spread, of course, to the neighbouring parts, and the stomach, duodenum, colon, lungs, and even the kidneys, are often involved in the destructive process. Sometimes the liver is found tumid and congested—the ducts either choked with inspissated bile, or reduced to an impervious cord. This constriction of the duct appears, in some cases, at least, to be the result of spasm—in others, of organic change from preceding inflammation. Our author very properly enjoins a careful manual and ocular examination of the region of the liver in all cases.

“Manual examination should, therefore, be resorted to on every occasion; and the trunk of the body should, in all cases, be exposed to the view of the practitioner, in order to ascertain if fulness or bulging exist in any part of the hypochondrium or in its vicinity. When manual examination is being made, one hand of the practitioner should be pressed at first gently upon the part between the base of the right shoulder-blade and the spine, whilst with the other he endeavours to detect, gently, delicately, and with refined tact, tenderness, fulness, or distension, either beneath the right false ribs, at the epigastric region, to the left of this region, or between the right hypochondrium and umbilicus. The state of the intercostal spaces should also be examined on the right side; and if pain be complained of in any of these situations, its nature may be inquired into by careful and varied pressure, whilst counter-pressure is being made on the back, in the place pointed out. The patient ought also to be made to breathe fully at the time when this examination is going forward, and he may be directed to bend, or move his body in various directions. If fulness, tumefaction, or distinct tumour, be felt, the practitioner should endeavour to ascertain their nature by gentle and varied pressure with the points of the fingers; and the existence of tenderness, the degree of tenderness, the depth at which it seems to be seated, and the presence of fluctuation, whether obscure or palpable, ought to be inquired into with as much dexterity as the practitioner can command.” 437.

ETIOLOGY.

Amongst the first causes of hepatic inflammation, Mr. A. places all those which “disorder the functions of the stomach, and at the same time derange the circulation in the biliary organs.” This vagueness of expression is not much cleared by what immediately follows:—“These are whatever directly or indirectly produces a plethoric state either of the vascular system generally, or of the digestive organs, with debility.” In a subsequent page we have a more tangible catalogue of the causes which produce hepatitis in our Eastern possessions. These are, full living, especially on animal food—high-seasoned dishes—high temperature—moisture—malaria—

neglect of the bowels—indolence—puberty—wine—insolation—depressing passions, and all the various causes of dyspepsia.

It is curious that the age of puberty seems to be so operative in disposing to hepatitis. The disease is seldom or never met with amongst Europeans before that epoch. There are many circumstances, however, which call into play the various causes of gastric and hepatic affections after the age of puberty, which were previously inoperative. Among the causes enumerated, Mr. Annesley dwells strongly on the effects of bad water. The depressing passions are consequences and causes equally of the disease in question. The influence of atmospheric heat in the production of hepatic derangements is now acknowledged almost universally; and it is on this principle chiefly, that we can account for the comparative frequency or infrequency of the disease in different parallels and localities of our Indian empire.

"A varied observation in different provinces in India has furnished us numerous proofs in illustration of the very extended influence of this cause amongst the natives of temperate climates; and we need only refer to the Abstracts of the Returns (given at p. 110 *et seq.*) and in the Appendix to the present volume, for proofs of this influence on an extended scale. In the Carnatic, the prevalence of hepatic disease is well known: here the range of temperature is much higher than in any other part of India; the fall of rain is also very much less than in the provinces under the Bengal and Bombay presidencies; and the soil more naked, more gravelly, and less retentive, than in the latter: hence the great heat is not so frequently nor so adequately abated; and the cooling effects of a fall of rain sooner cease. Whilst the provinces under the Madras presidency are near the equator, several of the other districts of the British empire in India are situate beyond the tropic; and thus, from latitude, and the various peculiarities of soil, situation, and climate, the Carnatic and several other provinces in the Indian peninsula possess a much higher range of temperature, and a proportionately greater liability to inflammatory affections of the liver. It is sufficient for us to express the result of our own observation respecting the matter, since the same fact has been very justly stated and illustrated in Dr. James Johnson's valuable work on tropical diseases, which is deservedly in the hands of every practitioner in warm climates." 441.

A series of very instructive cases of acute inflammation of the liver are here introduced by Mr. Annesley, some of which we shall abridge in the Periscope of this number. One case will be sufficient to illustrate the treatment of acute hepatitis, to which we shall next proceed.

"*Case.* Richard Kelly, (had been several years in India,) was admitted the 15th March, 1817, with the symptoms of congestion of the liver and accumulation of bile. These were removed by an emetic and purges. Five days after his discharge he returned, and on the evening of the 22d, the following report of him was given in the hospital journals:—Attacked with severe aching pains in the loins, shoulder-blades, and right side; anxiety; cold partial sweats; foul and excited tongue; and quick pulse.—Apply twenty leeches to his side. Calomel, gr. xx. h. s. s.

23d.—The pain in his back and side is relieved; but he has still occasional pain under the ribs: he has also some pain in the right shoulder. Tongue white and excited; pulse 80, small, irregular, and irritable. The pain is increased on a full inspiration. Was purged in the night.—Twenty-four leeches to the side; and the mist. purgans, with half an ounce of sulphate of magnesia. *Evening.* Pain of the side nearly gone, but he complains of soreness over his whole body; pulse 96; tongue dry, furred, and excited; great thirst; stools crude and copious.—Calomel. gr. xx. h. s. Mist. salina febr. A blister to his side.

"24th.—Stools crude and full of viscid mucus; pain in his side and shoulder gone; tongue white and furred; pulse 78.—Pulv. purgan. ʒjss. staa. Rub in ʒj. unguent. mercur. thrice daily. Pilul. hydr. cum calom. no. 1 ter die. Haustus amar. cum sennâ, ʒij; primo mane.

"This treatment was continued during the 25th and 26th. The pulse became less frequent; his tongue cleaner; and his motions more natural. On the 27th, he had a slight return of pain in the night, beneath the fifth rib of the right side; but his tongue and stools were natural at the morning visit; his pulse 66; and his skin cool.—Twelve leeches were applied, and the pilul. hydr. cum cal.; the mercurial friction and haust. amar. cum sennâ were continued.—*Evening.* Can breathe with perfect ease; no complaint.—On the 31st, the mercurial friction was diminished; the pilul. hydr. cum cal. was omitted; and five grains of blue-pill given every night; the saline mixture through the day; and a dose of the purging mixture early in the morning.

"On the 2d April, he was perfectly well; his bowels, tongue, skin, and pulse, being perfectly natural. The blue-pill and mercurial friction were left off; and a dose of the purging mixture given occasionally. He was discharged on the 4th.

"*Remarks.* This case illustrates chiefly the connection often existing between functional disorder and inflammation of the organ. The symptoms were clearly referrible, in this case, to the liver, and indicated disease affecting principally its internal structure. In this case there was no rigor at its commencement; and the pain of the shoulder was at first not present. General soreness, after the pain had been removed by depletions, was here complained of, and is a frequent symptom of inflammation of the internal structure of this important organ." 448.

TREATMENT OF HEPATIC INFLAMMATION.

This is one of the most important subjects which a tropical writer can descant on—especially as there is some discrepancy of opinion, not so much in respect to the nature of the remedies, as to the extent of their application.

General and local bleeding. Although this is the most powerful of all therapeutical agents, even between the tropics, yet it is not *there* practised to the extent which Mr. A. deems proper. This, of course, is owing to a lingering portion of ancient prejudice. The following are his sentiments on this head.

"We can truly say, as respects the different forms of inflammation of the liver as they occur in India, that we have had occasionally to regret not having practised blood-letting when it might have been attempted with hopes of success, or carried it sufficiently far to be really beneficial; but we have never found that mischief resulted either from its performance, or the extent to which it has been pushed. Numerous instances, on the other hand, have come before us where,—from early education, the indulgence of prejudices, an indifference to the examination of those who have died of this class of diseases, and, consequently, from an insufficient acquaintance with the nature and extent of disease which occasioned death,—sufficient vascular depletion had been neglected at that stage of the malady when it might have been most serviceable, and the formidable consequence of disease prevented." 583.

Leeches in India are abundant and of excellent quality—consequently local depletion, to any amount, may be expeditiously effected. In the majority of cases, the local is preferable to the general bleeding—though the latter is indispensable amongst those who are fresh from Europe, full-blooded, and robust. Mr. Annesley ascertained that Indian leeches, on an average, extracted an ounce and a quarter each, besides what flows from the bites. In the active forms of hepatitis then, and among recently arrived Europeans, Mr. A. took one or two bleedings from the arm—the first carried to the point of making a sensible impression on the vascular system. When the excitement returned, from 16 to 30 leeches were applied to the right hypochondriac and epigastric regions. If the symptoms were not considerably relieved by these general and local depletions, the leeches

were re-applied, and a large hot poultice laid over the bites, these last being stopped from bleeding previously. Mr. A. attaches great importance to the poulticing practice, especially where the hepatic disease is complicated with biliary derangement and dysenteric symptoms. The repetition of the local bleedings must, of course, depend on circumstances that require no detail here.

Among those who have resided long in India, local depletion will be generally sufficient, even in the most acute forms of the disease. With soldiers who have been addicted to strong liquors during their tropical services, depletion must be very cautiously employed.

Mercurials—purgatives, &c. When we consider how much the function of the liver is deranged before and during the attack of hepatitis—and how morbidly altered are its secretions, we cannot be surprised that purgation, and especially mercurial purgation, should be very generally necessary.

“For this purpose, we have generally prescribed, immediately after the first vascular depletion, a full dose of calomel, as this medicine appears to us the most beneficial in inflammatory states of the system, the most active in eliciting a healthy secretion of bile, and the most efficient in dissolving that viscid and tenacious secretion which covers the mucous coat of the intestinal canal at the commencement of nearly all the disorders affecting the organs of digestion. Unless the patient has come under treatment early in the day, when we have given this medicine immediately, we prefer the exhibition of it at bed-time, as it will then not disturb the rest of the patient by its operation, and will have had time to produce its effects upon the secretions and secreting viscera before morning; when a brisk purgative should be given, in order to carry out of the system accumulated feces, and those morbid secretions which the previous exhibitions of the calomel had prepared for removal. 593.

Mr. A. prefers the compound powder of jalap to other purgatives, for the above purpose—next to it, castor oil, and lastly, the “black draught.” It is of great consequence in this complaint that the patient should not be disturbed in the night—and, therefore, when the bowels are irritable, Mr. A. recommends an opiate—even when it is necessary to give calomel every night. The following observations are important.

“If the exhibition of twenty grains of calomel at bed-time, and a purgative in the morning, saline diaphoretics being given through the day, affect the mouth, which frequently happens when vascular depletion has been carried sufficiently far, ptialism should be quickly induced; but after its supervention, mercurials ought to be laid aside for a time. The reason of our recommending the speedy induction of ptialism after the mouth becomes affected, is an idea which we entertain respecting the influence of the constitutional effects of mercury upon inflammations of the liver; namely, that to induce the mercurial excitement of the vascular system, indicated by slight soreness of the gums, and to exhibit mercury or calomel in small quantities, frequently repeated with this view, is to keep up a state of slow inflammatory action in the secreting substance of the liver, which may of itself terminate in abscess; whilst, if the full operation of mercurial remedies be speedily induced, and ptialism become abundant, a derivation from the seat of disease is occasioned to the mouth and salivary apparatus, the disease in the liver speedily subsides, and the functions of the organ are restored to their healthy state. We believe that much evil very frequently results from the general habit of giving too frequent doses of calomel, with a view of inducing the constitutional effects of mercury. Those who prescribe five grains of calomel every three or four hours, with this view, produce much greater irritation of the alimentary canal, are longer in obtaining their object, and exhibit much more calomel for the removal of the disease, than those who give twenty grains only at bed-time. This latter dose acts as a sedative to the irritable stomach in this disease, whilst

smaller doses increase the irritability of this viscus when it is present, and often induce it where it was previously absent." 594.

If bowel-complaint exist or supervene, one or two grains of opium are to be combined with the calomel, and emollient enemata should be thrown up. In this way the calomel will soon affect the system, especially if vascular depletion have been sufficiently employed previously. Mr. A. is not an advocate for going on to the production of full ptyalism, in those cases where the secretions become healthy, before that event takes place, and the other symptoms subside.

"But if the secretions and stools still remain morbid; if any disorder can be detected, by a careful examination of the patient, in the seat of the liver or in the abdomen; if the tongue be not natural; and if the countenance be sallow or unhealthy,—the speedy induction of ptyalism will then often prove of service. If, however, we fail in inducing this effect in the course of four or five days, we shall generally find it detrimental to continue this plan any longer. The means by which the speedy induction of the mercurial action may be accomplished are various; but we have generally relied most upon mercurial inunction, performed thrice a day, with a combination of camphor with the mercurial ointment, the patient taking the usual full dose of calomel at bed-time, combined with James' powder, or antimonial powder and opium." 596.

Ptyalism once fully established, the mercurials are to be discontinued, and gentle tonics combined with alkaline carbonates are to be administered, together with saline aperients.

In the subacute and less active forms of Indian hepatitis, the use of saline purgatives, alternated with mercurials and alteratives, will generally be sufficient, after moderate depletion. But these failing, "the practitioner should endeavour, in the manner stated above, to induce, as speedily as possible, the full effects of mercury."

Auxiliaries in the Treatment. "There are very few remedies which are more deserving notice than the nitro-muriatic acid wash, and the internal use of nitric acid, in cases of acute hepatitis, after active depletions and mercury have been used: they promote the return of strength and the healthy establishment of the biliary secretion; and if deobstruent laxatives, with suitable regimen, be prescribed, and adhered to during their use, they remove obstructions, and promote a free circulation in the vessels of the liver. As a restorative of the energies of the system after mercurial courses, they have generally proved beneficial in our practice, particularly when conjoined with the cautious exhibition of gentle tonics, with light but nutritious diet, and suitable regimen." 600.

On the complications of acute hepatitis with pleuritis, gastritis, and inflammations of different contiguous organs, it is quite unnecessary to dwell, since the principles of treatment cannot be misunderstood, after what has been already detailed. From this article, the English reader will be able to form a very correct idea of the practice of medical men in the acute and dangerous inflammations of the liver between the tropics. Mr. Annesley is a man of such ample experience, sound judgment, and scrupulous fidelity, that every thing falling from his pen is highly valuable. If we have regretted the costly manner in which he has cast his volumes, and the unnecessary minuteness with which he has treated most of his subjects, we can assure him that not one of his most ardent admirers entertains more unfeigned respect for his talents and industry than ourselves. We cannot help again suggesting to him the propriety of publishing the letter-press of these volumes in a more condensed and less expensive form, leaving the plates to be purchased by those who can afford the expense.

In our next article we shall take up the important subject of CHRONIC HEPATITIS, a disease now imported annually into this country, so as to make it a matter of anxious investigation with every medical practitioner. An accurate acquaintance with the acute forms of Indian Hepatitis, however, is indispensable to the study of the chronic forms, and for this purpose we have laid before the English reader a very comprehensive analysis of the facts and observations recorded in the great work before us.

VIII.

The Morbid Anatomy of the Bowels, Liver, and Stomach. Illustrated by a series of Plates, from Drawings after Nature, with explanatory Letter-press, and a Summary of the Symptoms of the Acute and Chronic Affections of the above-named Organs. By JOHN ARMSTRONG, M. D., Lecturer, &c. Fasciculus I. and II. 4to. pp. 70. with ten coloured plates. Baldwin. June and July, 1828.

[Art. I. Fasciculus I.]

Dr. Armstrong's works on Typhus &c. which appeared some ten or twelve years ago, procured for their author a reception and patronage from the professional and general public, such as have never before been witnessed or experienced in the annals of medicine. From being a successful author, Dr. A. became, in a very short time, one of the most successful candidates for private practice in this great metropolis, whither he came a total stranger—and, from a successful career in practice, he turned his attention to medical tuition, where he quickly drew a larger class of students than any other physician in London. Some people may say this was all good fortune—or chance. But we have an idea, that to take such a lead in three different and difficult walks of the profession—writing, practising, and teaching—requires something more than the chapter of accidents, the patronage of friends, or the caprice of fashion.* A single glance over the two fasciculi before us convinces us, had we no other reasons for conviction, that Dr.

* Whenever a medical man arrives at any distinction by his writings or his practice, three fourths of his *contiguous* brethren divide into two sects—one (a very small party comparatively) extolling him to the skies, and seeing in him nothing but excellence—the other (a tolerably numerous band) depreciating the fortunate candidate, running down every thing that comes from his tongue or pen, and ascribing all his success to the indiscrimination of mankind, and the blindness of Fortune. Happily there is a third and very influential PERSONAGE, called the PUBLIC, who, being far removed from the sphere of private and personal feelings, forms a tolerably correct estimate of men and things in the long run. It was but the other day we heard the following fragments of a dialogue between two medical gentlemen who met in Regent Street:—

A. "Have you seen Dr. Armstrong's Plates?"

B. "Yes."

A. "Were there ever such *doubs* offered to the medical profession? The two fasciculi are a disgrace to any physician!"

Now if we might be allowed to judge, we would say, that the plates are very superior, but that we cannot vouch quite so much for the letter-press; though the meagreness of the latter may be accounted for by the circumstance that Dr. A. is preparing a larger work on the same subjects.

Armstrong has effected a new era in medical tuition. The introduction of highly finished drawings and models of natural and diseased structures, into purely medical lectures, has never been put into execution on any large scale, till Dr. Armstrong fortunately struck out the path—and the consequences are sufficiently obvious.* These drawings and models are infinitely superior to anatomical preparations, which never can retain any great verisimilitude to the structure during life. By these auxiliaries to oral instruction, the eye is made to assist the ear, not only in the conception, but in the retention of pathological knowledge. Dr. Armstrong is entitled to great praise for the introduction of these aids to medical instruction, because his example *must* be followed by his cotemporaries. The plates in this work do honour to this country, and have never been equalled for beauty of execution and accuracy of representation. This is saying a great deal, after the plates which have appeared from Mr. Annesley and Dr. Bright; but we believe we are perfectly safe in the opinion which we have here given. We must now proceed to the letter-press.

Dr. A. observes, in his preface, that two of the most prominent causes which have tended to retard the progress of morbid anatomy in this country, are—"prejudice on the part of the public, and something very like indifference on the part of the profession." He thinks it easy to account for the former, "on those inherent principles of our nature, which lead us to regard as inviolate the relics with which so many endearing recollections of life are associated."

"Yet it would be difficult to assign any very satisfactory reason for the professional indifference, once so extensively diffused, unless it owed its origin to that scholastic system of education, which directed the mind to nosological technicalities and metaphysical abstractions, rather than to the particular details and general inductions of pathological anatomy." *Pref.*

We fear there is some truth in this severe reflection on medical education!

It is not Dr. A.'s design to delineate all the morbid appearances connected with the organs mentioned in the title-page, but to select those which are the most important, and which have been examined by his own hands and eyes. The annexed symptoms also are drawn from personal observations at the bedside of sickness.

Morbid anatomy, Dr. A. observes, appears a vast field at first sight; but if, for instance, we take the acknowledged products of inflammation, as seated in this or that texture, and to them add tubercle, scirrhus, fungus, and melanosis, we have at once a bird's-eye view of the most important changes which occur in the solids. But the fluids are directly or indirectly concerned in almost all morbid conditions of parts, and these must be taken into consideration. From some good general observations on the changes that take place in the quantity, quality, velocity, distribution, secretions, &c. of the blood, we shall select the following extract.

"Again, in some cases of fully developed typhous fever, where the tongue was glazed, dry, and brown, and the lips and cheeks of a dusky or purple hue, the blood drawn from a branch of the temporal artery had the venous colour. The circulation of such blood within the arteries is connected with many of the most conspicuous and curious phenomena of the advanced stage of genuine typhus. The cause of this remarkable change can be shown, by dissection, to depend upon a specific Bronchitis, the mucous texture of the bronchial tubes being loaded by dark blood, and besmeared by a copious and tenacious

* We ought to except Dr. Thompson, of Edinburgh.—Ed.

secretion. The experiments of Dr. Edwards have proved, that two changes take place in the blood during respiration, namely, that carbonic acid gas is secreted directly from the blood, and that the oxygen disappears, not having combined, as was formerly supposed, with carbon, to form, thus indirectly, the carbonic acid. Now in the bronchial affection attendant on typhus, one or both of these processes are defectively performed, for the venous blood is returned, imperfectly changed, to the left chamber of the heart, and the circulation of this dark blood in the arterial system is, next to the original taint of the remote occasion, one of the most remarkable changes in the blood in cases of confirmed typhus. Browne Langrish, a century ago, inferred from experiments that the proximate principles both of the blood and of the urine were changed in fever. But with respect to typhus this is not always the case in the beginning, except where Acute Inflammation takes place in a serous membrane, with high excitement, or where an extreme Bronchitis exists, with an imperfectly developed excitement; and then the buffy coat is shewn on the blood drawn in the first case, while in the last, the blood usually remains fluid, and the relative proportion between the cruor, fibrine, and albumen often undergo remarkable alterations, apparently from the influence of the Bronchitis, which, by impeding the offices of respiration, materially affects the assimilation of the blood. The proximate principles, too, are changed towards the middle and advanced stages of typhus, rather by the defective digestion attendant on the mucous irritation of the alimentary canal, and the defective assimilation attendant on the bronchial affection, than from the direct agency of the specific taint from which the disorder originally arose; for I have found similar changes in the proximate principles of the blood both in Acute and Chronic disorders, which sprung from remote occasions of a common kind, and which could not communicate any contamination at once to the blood. As far as the remote occasions and ultimate effects are concerned, fevers might be advantageously divided into Common and Specific; the Common proceeding from the ordinary agents of nature, such as heat and cold, used in the popular sense, and the Specific arising from peculiar agents, such as putrid matter, and the human contagions. Even in Common fevers, it would be easy to prove that the blood undergoes sometimes very striking alterations, but this is more especially the case in Specific fevers, the peculiar occasions operating on the blood, and that again, in its turn, influencing the condition of certain solid textures. For example, in puncture from dissection three effects are produced. The first a mere local pustule, without any remote disturbance; the second a considerable topical inflammation, which produces fever, on the ordinary principle of irritation, of a common character, from beginning to end; but there is a third and more formidable effect, namely, an absorption of putrid matter, in general from a slight wound, which, tainting the blood, produces true typhus fever, usually of the continued type. Now if putrid matter be so introduced into the blood as to give rise to a distinctly marked fever of this specific sort, the brain and its membranes, the bronchial lining and that of the small intestines are invariably, so far as my dissections have extended, affected by the appearances of Increased Determination or Inflammation, when the disorder runs its definite course of about three weeks; and as these appearances are found in the male and female, in the young and old, whatever may have been their temperaments or habits, so it is reasonable to conclude, that the contamination of the blood operated specifically on the forementioned textures. If it be contended, that the capillary injection of all the above-named parts is the effect of the continued excitement, the objection admits of a ready answer; since in Common fever, in Acute rheumatism for instance, when the excitement is often higher, and remains longer, such effects are not uniformly displayed. In like manner, the contagions of small pox, measles, and scarlatina first operate on the blood, and that fluid being thereby changed, the solids are specifically affected, especially the skin, and mucous membrane of the air passages; and these affections, too, if left to themselves, and even often in despite of medical applications, have a determinate course, the blood, apparently, like the water of the Thames, requiring a certain time for its purification, which it effects, perhaps, by throwing off the effete and superfluous matters, through the secretions and excretions," 10.

Believing, as we do, that the progress of knowledge tends more to reveal our weakness than increase our strength in therapeutics, we are not so

sanguine as Dr. A. in the following aspiration:—"the time may come, and probably will come, when disorders, whether acute or chronic, which arise from specific occasions, (as the eruptive diseases,) will be directly removed by remedies acting through the blood, and thus the structure of the solids saved from that indirect derangement, so frequent under the existing and imperfect state of our art." We cannot follow Dr. Armstrong through a series of elementary observations on the state of the blood, and of the various secretions in disease. They are well worthy of attention. The following passage bears on a disputed point of pathology, and will be read with interest.

"The tubercle has been supposed by an able and ingenious author, Dr. Baron, to commence as a vesicle, and to be nothing more or less than a hydatid, if I rightly comprehend his meaning. But I have purposely noted a great variety of cases with much care, and found that the vesicular appearance of the Tubercle is simply an accidental occurrence, dependent on the texture of the part in which it is placed. Thus, for example, in their origin, Tubercles may have the vesicular appearance in the lungs; but these, if minutely examined, will be found to be the extremities of the bronchial tubes, or air cells, into which the peculiar deposit, constituting tubercle, often takes place. Frequently I have examined, under a strong light, Tubercles on the serous membranes, and have never yet found them, strictly speaking, vesicles there, though the tubercular points, in many cases, have been extremely minute. It appears to me, that Tubercles are secretions, from the ultimate ramifications of the arteries, called the exhalents; for I have preparations in which they seem to hang from the arterial capillaries like bunches of grapes from the shoot of a vine-branch.* Tubercle generally begins in a semi-opaque point, it becomes wholly opaque, and is then often of various sizes, but most frequently of a millet or mustard-seed. It does not, so far as I have tried, admit of injection at this or any other subsequent stage. It may remain latent for a long time in the primitive semi-opaque, or secondary wholly opaque condition; but it in general undergoes a third change, increasing in size, it may be, to that of a small pea, or several Tubercles running together may form a much larger mass. Having been once progressive in the last-mentioned mode, they generally undergo a fourth change, soften in the centre, and at last are resolved throughout their whole substance by a process apparently analogous to that of suppuration. Sometimes Tubercles are enclosed, like a kernel, in a thin or dense capsule, particularly when they form in glands; and sometimes the cavities occasioned by their solution are surrounded by a false membrane of effused fibrine; but, in the lungs, the mere parenchyma often forms the walls or boundaries of a vomica, or excavation. The number and the increase of the size of Tubercles frequently create irritation in their vicinity, so that a consequent Inflammation of the surrounding texture is not an uncommon circumstance, as may be daily witnessed in the dissection of bodies dead of phthisis pulmonalis. If, as above stated, Tubercle be a secretion from the arterial terminations, it follows that it is but the effect of some preceding change in the solids or fluids, or in both these. Is it one of the products of inflammation, or is it a peculiar deposit, the immediate pathological causes of which are as yet unknown? Certainly, if the matter of tubercle be examined, it more sensibly resembles the fibrine or albumen of the blood than any other material. But it may be said that the fibrine or albumen of the blood, when effused, during disease, is an organizable substance, and that tubercle, not admitting of injection, is not apparently endowed with that property. It might, however, be answered, that effused fibrine or albu-

* "To show tubercles in this state, it is requisite for the part to be macerated in simple water, exposed to the sun, without a cover, till putrefaction take place, and then it should be washed under a gentle stream, such as that from a cock in a barrel, daily, until the parenchyma of the lung be completely separated."

men is not always organizable, as we perceive in weak subjects affected by pericarditis and pleuritis, where loose lymph often exists abundantly, without any adhesions. Moreover, it might be urged, that our incapacity to inject Tubercle is not a perfectly conclusive proof of its want of organization, the vessels being, possibly, too minute to admit the artificial fluid, and the growth and solution of the Tubercle contribute to show that either it, or a delicate membrane which so often invests it, may be endowed with a low degree of vitality, by which it increases till it reach a certain extent, and then passes into decomposition, like many other productions of nature. Against the idea, however, of Tubercle being simply the effect of Inflammation many facts might be adduced, but one may suffice. In many instances, where tubercular points are scattered over the pleura or peritoneum, the serous membrane is transparent up to these points, and only becomes reddened or opaque when the tubercle has become progressive and enlarged, so as to act as a local irritant. Yet it seems probable, that Tubercle is connected with an effusion of the fibrinous modification, though, according to my observations, that effusion is not necessarily connected with Inflammation. Certainly, Tubercle and Inflammation are often co-existent, and so are the hydatid and Tubercle occasionally, but co-existence does not imply a direct dependence or relation. The tendency to Tubercle, like that of other extraneous formations, is strikingly hereditary; and indeed the miliary Tubercle, perhaps the germ, as Laennec supposes, of all the rest, has been found in great numbers in the lungs of still-born children; but in every case of this nature which has fallen under my own observation, the mother was tubercular, or tabid, during the period of gestation. Nevertheless, it seems to me quite certain, that Tubercles may be, and frequently are, generated, *de novo*, in the human body and in the lower animals. In almost every instance, when I have traced their development after birth, two circumstances have preceded, namely, a previous condition of debility, accompanied by some degree of attenuation; and, secondly, preternatural paleness of the skin, with co-existent signs of irritation on some portion of the internal mucous texture; and to these changes, whether induced by evacuations, mercury, protracted disorders, bad diet, anxiety, night watching, sedentary habits within doors, or any other enervating circumstance, the operation of a low or variable temperature has generally been superadded, as an exciting occasion to the prior state of predisposition. This doctrine, in a preventive view, is highly important, and it shall be confirmed in the subsequent pages by many facts and arguments, which will prove, not only that Tubercle in general is the ultimate result of an antecedent change in the fluids and solids, but that its development may be prevented, in many cases, by preserving the general strength entire, and enabling the surface, through cool ablutions, and daily and much exercise in the open air, to sustain the shocks of our fluctuating climate; for tubercles are, in most instances, only produced in the internal organs of an ill-conditioned subject, as vermine are said to be formed upon the skin, when it is kept uncleanly, and when the body is shut out from the wholesome influence of light and air. The existence of tubercles in the lungs of still-born children cannot be held as a valid objection to the view here taken, since the fœtus was formed within a sickly mother, whose blood conveyed to it, perhaps, the materials of contamination, nay, its body and imperfect health might be regarded merely as integrant parts of the mother herself. Upon inquiry it will be found that those persons who are made the most delicate by domestication and other debilitating causes are the most prone to consumption, and the same assertion is applicable to the lower animals; whereas, those persons, such as gipsies, hawkers, and the like, who are continually in the open air, provided they be temperate, are the least liable to tubercles; and it would be easy to prove that the same doctrine is verified by a review of the habits of the lower animals, more especially of the sheep and horse." 18.

Dr. A. has never been able to trace scirrhus to the capillary exhalents, though he thinks it probable that it proceeds from those about the part affected. It is curious that scirrhus and tubercle co-exist in the same individual. Our author has seen but one instance of their cotemporary existence.

"If what many pathologists have termed the scirrhus liver of a confirmed drunkard be properly macerated, we shall often find that the interstitial deposition being washed

away, the arteries, even the minute ones, are thickened and almost cartilaginous, seemingly from inflammation, appearing not very dissimilar to the cancelli of some bones, or to the blanched interlayings of net-work. The interstitial deposition sometimes appears to exist in patches, and sometimes pervades the whole liver; it is of considerable firmness, and commonly of a greyish-white colour; and though in a recent state it cannot be squeezed out, yet by long maceration first, and pressure between the fingers next, it can always be separated, so as to leave the true character of what has been designated by the term Cancellated Induration. In one case, a solid fibro-cartilaginous patch existed in the liver corresponding to the ordinary Scirrhus, but a little above this patch the Cancellated Induration was apparent, and seemed to be lost in the other. Has Scirrhus any connection with chronic Inflammation of the capillary or larger vessels of the affected part? Has it any connection with the veins of the part, into the calibers of which the scirrhus matter is sometimes effused? More minute attention than has yet been paid to the subject would be requisite to authorise any one to give an unqualified answer to these questions." 20.

Simple induration is very common, and arises from the effusion and subsequent organization of lymph in the parenchyma of any organ, as, for instance, in hepatized lungs. Softening, on the other hand, is also a product of inflammation. Scirrhus and fungus encephaloides are frequently found co-existent, though they are evidently very different morbid growths. The latter is generally enveloped in a cyst, but is sometimes found dispersed among the different textures of the body. In respect to melanosis, Dr. A. considers it a "secretion sometimes occurring in textures, otherwise apparently natural—sometimes in those chronically inflamed—and sometimes co-existent with either scirrhus or fungus." The author is evidently inclined, therefore, to view the disease as one of the fluids rather than of the solids.

"As far as my recollection serves me at present, every case of Melanosis which I have witnessed was accompanied by more or less of chronic bronchitis; but it would require the care of other men to determine whether this conjunction be constant, or merely occasional; for no error has been so prejudicial in medical philosophy as universal conclusions, drawn from a limited number of particulars. It is clear, however, that bronchitis, simply of itself, is not sufficient to produce Melanosis, numerous cases of the former occurring, in which, on examination after death, no trace of the latter is any where discernible. But, on the other hand, is it at all probable, that bronchitis may be one of the precursory or concurring causes of Melanosis? Is it possible that, by changing the whole mass of blood into a more venous character, bronchitis may favour the dark and peculiar secretion, respecting the composition of which chemists have differed." 25.

The first fasciculus of the work before us is dedicated to the STOMACH, the principal morbid affections of which are classed under the heads—"increased determination—inflammation—scirrhus—and fungus encephaloides." It is remarkable that Dr. A. should not have included NEURALGIA of the stomach among its principal affections, since, if the frequency of its occurrence, and the distress occasioned by it be of any importance, the disease ought to have occupied the first rank, instead of being put out of the ranks almost entirely.*

* There are a few lines respecting the gastric neuralgia of young women who starve themselves in order to get lean, but very little or nothing on the great class of neuralgia connected with indigestion.

In respect to inflammatory affections of the stomach, Dr. A. appears desirous of steering a middle course between the Continental and British pathologists.

"Some pathologists on the Continent seem to think, that Inflammation of the Stomach very frequently occurs, especially in the mucous texture; whilst some in this country conceive, that, though this viscus be greatly abused by our artificial and luxurious habits, it is nevertheless, but seldom the seat of actual Inflammation. The truth appears to lie between the extremes of these opinions; for while I am ready to admit, that Increased Determination has often been mistaken for Inflammation of the mucous texture of the stomach, yet I am equally certain, that Inflammation is not so very uncommon a circumstance, oftener, indeed, assuming the chronic than the acute character. Increased Determination is not accompanied by the combined symptoms and progressive effects of Inflammation during life; and though, after death the mucous texture of the stomach be found red by a preternatural injection of the capillary vessels, yet none of the genuine products of Inflammation are present, such as effusion, softening, thickening, or so forth, and it may thus be easily discriminated from the latter.

"When the body is examined shortly after death, the vestiges of acute and chronic Inflammation of the serous and mucous membrane of the stomach are generally very distinct. In acute Inflammation, the capillary vessels, but more particularly the venous ones, are much injected by red blood; and there are, besides, some of the palpable products of Inflammation connected with effusion. These circumstances, being conjoined, are indisputable evidences that Inflammation had existed. The injection of the serous membrane is most frequently arborescent, the minute arteries and veins shooting, as it were, like the branches of a tree, in different directions, or, what many perhaps be a more apt comparison, winding across, like the vessels seen in a leaf when held between the eye and the light. Sometimes the redness, in part, is irregularly dotted, smaller and larger points appearing here and there, as if partial exudations of blood had taken place; yet, if these points be accurately examined, they will be mostly found nothing but engorged capillaries, in all likelihood the exhalents themselves, which, being still more extremely loaded, probably admit of that actual exudation that does occasionally occur. The serous membrane over the site of the Inflammation loses its natural transparency and becomes more or less opaque. Another circumstance remarkably characterizes acute Inflammation of the serous membrane, namely, that it is much more easily separable than natural. Indeed, it may be generally stripped off by the fingers, just as the rind is peeled from a ripe orange. Fibrine, pus, or some effusion of an intermediate character, is usually seen on its free surface, while serum is found in the vicinity, commonly discoloured by an admixture of one of the forementioned products. In most of such instances, a large quantity of gas is generated within the stomach, evinced by the extreme distension of that organ even during life.

"One of the most striking differences between acute and chronic Inflammation of the serous membrane, but more particularly that of the stomach and bowels, is the greater injection of the larger as well as small branches of the veins in the chronic, by which a darker colour is given to the part. Having seen this condition of the veins an almost constant attendant, I have inferred that these vessels are more intimately concerned in the phenomena of Inflammation, especially when chronic, than has been allowed in our reasonings on the subject. Not only is the opacity more evident in the chronic Inflammation of this texture, but the thickening more considerable and conspicuous. The late most able and excellent Laennec supposed, that serous membranes were not really thickened by Inflammation, but that the effusion of fibrine becoming organized on their free surfaces gave rise to the deception. Though such an apparent thickening be not uncommon, nevertheless it is not always thus produced. Bichat supposed that the serous membrane was composed of one layer; but if we macerate it for about ten or twelve weeks, in nearly equal portions of vinegar and water, we may divide it by nice management, into two or even more laminae, as shown by specimens in my possession. The laminae are knit

together, by cellular membrane, into which the effusion of fibrine sometimes takes place so copiously, that the substance of the serous membrane is really thickened. Where fibrine has been interstitially poured out in this way, an increase of density is the necessary consequence; but when a more albuminous, gelatinous, or serous fluid has been principally effused, which does not admit of subsequent organization, the serous membrane is often pulpy, as if from maceration, an appearance most frequent in lax habits. Softening is a common, but not a constant attendant of chronic inflammation, as may be perceived where adhesions exist between the serous membrane of the stomach and that of the liver, or between one portion of this texture and another covering the coils of the intestines. Ulceration of the serous membrane of the stomach is a rare occurrence from common inflammation, at least, I have only met with it occasionally; in the one case, occurring originally in that structure; in the other, reaching it through an extension of disease, from the mucous lining of that viscus." 29.

When the mucous membrane, on the other hand, is acutely inflamed, the remaining redness is intense, and generally diffused as if by a brush over the greater portion of its surface—sometimes circumscribed in broad stripes or patches gradually shaded or abruptly breaking off, with apparently sound intervening portions.

"At first sight, the acute inflammation of this texture has a close resemblance to painted velvet, it appears so red and raised; but on a closer inspection, the redness will be found to be partly of the arborescent, and partly of the dotted form. The combinations can be distinctly seen, if the inflamed portion of mucous membrane be spread upon the clean pane of a window, the redness then having at once a ramified and freckled appearance. Thickening, puffiness, softening, and easy separation, usually mark inflammation of this membrane;* but they are more manifest in that modification of inflammation which might be justly called sub-acute, and which stands between the acute and chronic, being less urgent, and more protracted than the former, though of much shorter duration than the latter. These changes, too, accompany chronic inflammation of the mucous membrane, which then generally has a gelatinous appearance, blended with an irregularly lmy, and almost freckled state; the first, from the partial softening of that texture, and the second, from the ramification of the minute subjacent vessels; while, at the same time, the mucous follicles appear either prominent, like papillæ, or are actually ulcerated, and the veins in the serous membrane are injected and enlarged. The existence of these follicles makes a considerable difference in the pathology of inflammation of the mucous membrane compared to that of the serous, as will be amply elucidated in the sequel." 30.

It is not the least of the anomalies presented in the science of medicine, to find the most opposite effects resulting from the same cause. Softening is equally the product of inflammation as induration. Phlogosis of the stomach will often leave a milky whiteness as well as an intense redness—thickening and attenuation of the coats depend on the same cause! These anomalies, in many instances at least, appear to our author to be connected with the state of the arteries or of the veins of the tissue, according as one or other set of vessels is principally concerned in the phlogistic process. This seems rather inclining to the hypothetical.

* "By long maceration, the mucous texture of the bowels may be shown to consist of three laminae, which almost appear like cobwebs, and which are seemingly united by cellular texture, resembling so much fine intervening lace-work. It is this cellular structure which is the main seat, in the different organs of the body, of most of our diseases."

SOME NOTICE OF THE PLATES.

The first plate is that of the stomach, representing the red suffusion and arborescent injection of acute inflammation of the serous membrane, with a deposition of fibrine on its surface, and some between its laminae. It is one of the best plates in the work.

The second plate was copied from a stomach, in which the inflammation commenced under a sub-acute form, and terminated in three weeks. The mucous texture was found highly injected, pulpy, and thick, with some ecchymosed spots.

The third plate shews attenuation, with solution of some of the texture of the stomach, from inflammation. The fourth is perforation of the organ in a child; and the fifth shews the thickened and pulpy state of the stomach from muco-gastritis and sero-gastritis. All these are done on stone, and the artists are entitled to great praise. Mr. Cocks, who made the drawings, is a gentleman of great merit. The colouring is much too high in most of the plates—a common fault in all pathological representations.

SYMPTOMS.

We must now proceed to give some account of our author's symptomatology, which is laconic, but evidently copied from nature.

1. *Acute Inflammation of the Serous Membrane of the Stomach.* The following is Dr. A.'s symptomatology of this important phlogosis.

"If the serous membrane be alone acutely inflamed, there is an urgent pain in the region of the stomach, increased considerably by pressure, there, and even by a deep inspiration. The breathing is hurried and anxious, the skin hot, the pulse very quick, and remarkably small, but for some time it will be found harder or more incompressible than in health, only becoming really weak and soft towards the close. The tongue is covered by a whitish fur, and the stomach is very flatulent and irritable throughout, nausea, retching or vomiting being present, especially when any food or medicine is given.

"There are two distinct stages in all acute serous inflammations—one of excitement, and another of collapse. In the stage of excitement the heat of the skin is higher than natural, the pulse, however small, more resisting than natural, and the respiration, though rapid, is not embarrassed; whereas, in the stage of collapse, the heat falls first on the extremities, and then on the trunk, the pulse grows soft and weak, and generally quicker than before, while the respiration is carried on feebly. These two stages are usually well marked in acute inflammation of the serous membrane of the stomach, the vomiting becoming more urgent, the skin damp as well as cold, and the face sunk in the last stage, or that of collapse." 41.

2. *Subacute Sero-Gastritis.* Although this differs only in degree from the former, pathologically speaking—yet this difference in degree is of considerable importance, and justifies the distinction. In this grade the fever is lower, and the local disturbance of the part affected is less—the progress is slower, in the proportion of two or three weeks to a few days. Vomiting is often absent in the subacute form, there being more frequently only a loathing of food, with occasional nausea, till towards the conclusion, when vomiting supervenes.

Chronic Sero-Gastritis. "In Chronic Inflammation of the Serous membrane of the Stomach, fever is either wholly absent, or, if present, it has a slow consuming character.

It is not, so far as my dissections have gone, a common circumstance to find Chronic Inflammation confined to the Serous membrane of the Stomach alone, it generally being complicated with Chronic Inflammation of the Serous membrane of the Bowels, or of the Liver. Chronic Inflammation of the Serous membrane of the Stomach is at all times obscurely denoted, but the forementioned conjunction tends to make the diagnosis more difficult. This form of Inflammation, however, may mostly be detected, by the symptoms having a permanent seat and character, and by the effects of the disorder being increasingly marked on the frame at large. There is more or less pain in the epigastric region, aggravated by moderate pressure, and accompanied by a sense of distention and confinement, particularly after any thing like a full meal. There is constant uneasiness about the stomach. It may be at times obscure, but is very liable to be increased by whatever offends that organ, which is then always more flatulent and irritable than natural. The flesh wastes, the skin acquires a sickly hue, the mouth is dry or clammy, the tongue is covered with a whitish fur in the centre, and is not only pale about the tip and edges, but often appears as if it were broader than before the attack.

"Pathological anatomy points out the propriety of discriminating Serous from Mucous Inflammation, and we might, therefore, call the above described modifications, Sero-Gastritis, and when that condition affects the mucous texture, we might call it Muco-Gastritis, the symptoms of which are next to be enumerated."

4. *Acute and Subacute Muco-Gastritis.* In this affection, the pain is of a more burning kind than in the acute sero-gastritis, and the desire for cold drink more insatiate. The pulse is softer—the fever less ardent—"the tongue is pale at the point and sides in acute sero-gastritis—but in muco-gastritis the tongue is vividly red at the point and some way round the margins, nay, often thus coloured over a considerable portion of its surface."

"These are the symptoms *proper* to each of the above varieties of Acute Inflammation, a concentration of heat about the Epigastrium, irritability of the Stomach, and anxious respiration being *common* to both. The same remarks are applicable to Sub-Acute Sero-Gastritis and Sub-Acute Muco-Gastritis when contrasted; but it must be constantly remembered, that there is less fever and less local disturbance in the Sub-Acute than in the Acute Inflammation, while the former is of longer duration than the latter, these being the three essential points in which they differ from each other." 43.

5. *Chronic Muco-Gastritis.* This is a far more common disease than the acute or subacute forms.

"Chronic Muco-Gastritis is attended, generally, by a vermilion tint of the tongue at the tip and edges, while the papillæ, for the most part, are red, and also raised, somewhat like the points upon a strawberry.* But the most certain sign is pain or uneasiness uniformly after meals, which increases as the disorder goes on, and which is at length accompanied by general wasting, and an acceleration of the pulse, with pallidity of the skin and slow fever. The temper, too, is more easily ruffled than natural, or the spirits depressed. If a doubt exist as to the nature of the disorder, it may generally be removed by the exhibition of a diffusible stimulus, which always increases the uneasiness in the Stomach, if Chronic Muco-Gastritis be present, so certainly does the system, in this case, resist or indicate the impropriety of the stimulant treatment. Now that this treatment is so prevalent, from the remains of a vague and erroneous philosophy respecting dyspepsia, the young practitioner would do well to recollect the test already named, which may be safely relied upon in almost all dubious cases; and, on the other hand, as some modern pathologists press

* "Chronic Muco-Gastritis and Chronic Bronchitis are often conjoined, and then the papillæ of the Tongue have a purplish cast."

the doctrine of Inflammation beyond its legitimate bearing, it is equally needful to be guarded on that point, lest evacuations should be used where stimulants are demanded. '

"In fact, there is a painful affection of the Stomach, which is not inflammatory, and which is relieved by stimulants. It mostly attacks those who have suffered much from anxiety, or who have been considerably fatigued or exhausted. But it may arise in robust persons, from any article of diet very indigestible, or from a complicated meal. In this affection the pain is usually severe, without the least degree of fever, and it is accompanied by feelings of distention, weight, and fermentation. It is in general soon allayed by drinking hot water, or by the exhibition of laudanum, but the most rapidly and effectually by that of pure brandy. This kind of pain has long been distinguished in popular language by the term Spasm of the Stomach, or of Windy Colic when it exists in the bowels, and the value of alkohol is well known to the vulgar in such cases." 44.

Our author observes that organic diseases of the heart are not unfrequently associated with chronic inflammation of the mucous coat of the stomach, especially towards their termination. In such instances, preternatural sensibility of the stomach, with nausea, retching, and vomiting, together with the crimson tongue, mark the nature of the ventricular disorder.

"If ulceration exist on the Mucous surface of the Stomach to any extent, patches or points of pus may now and then be discovered in the matter vomited, and these are mostly mixed with a glairy tough mucus, or streaked with blood. In the advanced stage of Chronic Muco-Gastritis, patients sometimes vomit considerably more fluid than had been drunk, and this is most liable to happen in those cases where the inner coat of the Stomach is blanched and soft, which occasionally occurs in truly inflammatory cases." 45.

In respect to dissolution and perforation of the stomach, Dr. A. places little or no belief in the solvent powers of the gastric juice. In all the instances of perforation which he has seen, "the most unequivocal signs of disease existed before death."

"In those cases, which occurred in adults, a sudden and severe pain arose, with vomiting, as if the patient had taken an acrid poison, and the fatal stage of sinking took place within forty-eight hours from the attack; but the infant, whose Stomach is represented in the fourth Plate of the first Fasciculus, lived about seven days after the violent seizure, having been previously weaned, and weakly, from the history of its mother. The dissolution of the Stomach was announced by sudden and severe fits of crying, attended by a distressing sickness, and retraction of the lower limbs towards the abdomen. The epigastrium was hot—the integuments of the belly hard—the pulse quick—and the respiration anxious. Diarrhœa supervened—the face gradually assumed the hippocratic character, and the extremities became cold. Such were the leading symptoms in the other cases which happened in my practice after weaning, all having been more protracted than those of the adults. It is not my intention to deny, that the Gastric juice may dissolve the Stomach now and then after death; but, in the preceding cases, disease certainly existed in that organ, and was apparently the cause of the dissolution. If it be asked, what was the nature of that disease, I answer, that I do not know. The Mucous membrane is sometimes attenuated and even destroyed by Inflammation, but occasionally similar changes take place from a process, seemingly, not inflammatory; and, as in the fore-mentioned cases of dissolution, the usual traces of ordinary inflammation were not present, it is not logical to refer the effect to that cause. It may be, however, that some change shall take place in the mucous texture, or in the blood, by which the secretion is so altered as to act destructively upon the Stomach during life; but, as there is no end to conjecture where observations are too imperfect for legitimate deductions, I must leave this point of pathology to the consideration of succeeding inquirers." 47.

On perforation from chronic ulceration of the stomach we need not dwell. The symptoms of sudden peritonitis generally supervene, and death soon closes the scene. We have now finished the first fasciculus and laid before our readers a very ample analysis and numerous extracts, by which they can judge for themselves. Did we indulge in rigid censure or indiscriminate praise we might be suspected, and justly so, of belonging to one of the parties described in the first page of this paper.

We shall proceed to other organic diseases of the stomach in our next article.

IX.

On difficult Cases of Parturition: and the Use of Ergot of Rye. By W. MICHELL, Member of the Royal College of Surgeons. Octavo, pp. 128. Underwoods, 1828.

AMONG the blessings and curses attendant upon, or rather produced by, the progress of civilization, are crooked spines and lingering labours. Well! had it not been for the evil sent into this world, we should have been deprived of much of the good we possess. The diseases of the body have called forth the energies of the mind, and for every corporeal defect we have twenty different remedies. It is curious that the action of *specific* medicines (by which we mean medical substances that act *specifically*, or particularly on one organ or function) should have been more frequently discovered by the ignorant, or at least the empirical, than by the most enlightened and learned physicians. The reason, however, is not very difficult to assign. The ignorant look upon all medicinal agents as specifics, and consequently are always hunting after such agents. The LEARNED have little faith in specifics, and are more employed in the investigation of structures, functions, and the general operations of drugs on the animal economy. We believe there is no substance better entitled to the title "SPECIFIC" than the ergot of rye—a substance, the good properties of which were first appreciated by old women beyond the Atlantic. If we can credit the anticipations of the author whose work is before us, and who appears to be a sensible, a well-informed, and an experienced practitioner, this little abortive grain of rye will effect a greater revolution in medical practice than vaccination—and will go farther to bring back midwifery within the domain of its original professors, than all the orations of Sir Anthony Carlisle. The following extract will make our meaning intelligible.

"Every candid and honest practitioner will admit, that if we could discover any treatment which would effect delivery with safety to the mother and child, it would be preferable in other respects, and tend to the comfort of the Medical Practitioner, to resign the Midwifery branch again to the Female Attendant, except in some particular dangerous

cases. To increase and quicken the Uterine action, and thereby facilitate delivery, I have tried various vegetable and mineral substances. Many of the vegetables have possessed this power to a certain extent; but the minerals produced no effect whatever. These endeavours led me immediately to notice the accounts of the Ergot of Rye, and to subject its pretensions to the test of my own experience. The result has been, that after its successful application for many years, I am now fully convinced that it is a safe and efficacious medicine in accouchery cases; possessing all the properties which a Practitioner could desire. Its effect on the contraction of the Uterus, both before the expulsion of the Fœtus, and after this has been accomplished, is such as to remove all danger attendant on the woman, quickening and facilitating the delivery, and preventing spasm or flooding afterwards. I am of opinion, therefore, that as soon as it is generally known in female practice, it will supersede the necessity for male practitioners, except in a very few instances, where the disproportion of parts is very great, or the presentation such that delivery cannot be effected without turning; in such cases the medical man will still be called in, but these will not occur in more than one out of 200 of the medical man's present accouchery patients. This, I have no doubt, will be hailed as a great relief by the generality of the Surgeon Apothecaries in country practice. It may be considered as somewhat extraordinary, that the virtues of the Ergot should not have been known until the present century; had they been discovered before, the Surgeon would never have acquired his present practice in Midwifery—the Females would still have retained it, and the lever and forceps would never have been invented—the new practice would not have superseded the old, which was a far preferable system, and most unquestionably so now, when we have the Ergot to assist in cases of sluggish labour, from rigidity of the Ligamentous, and other soft parts of the Pelvis. Before the Ergot was administered, the forceps were a necessary appendage of Midwifery practice; indeed, without them the surgeon could scarcely have superintended this practice together with his other engagements. When the Os Uteri was fully dilated, and the friends and patient most anxious to have the delivery effected by any means in the power of the Accoucheur, it cannot be expected that with the means in his possession of expediting the labour, he should prefer waiting twenty-four hours, during which his attendance is required in various other places, rather than have recourse to the forceps which have perhaps frequently relieved him in similar circumstances. Had not the invention of the forceps by Dr. Chamberlain preceded the discovery of the virtues of the Ergot of Rye, it would have been received as the greatest boon ever given to the medical world. That its benefits have not been more generally acknowledged, may, perhaps, in a great measure, be attributed to the prejudices of self-interest, which must clearly discern a falling off of fees when Ergot shall have been extensively introduced. When rye comes into general use, the medical man will seldom be called to apply the Forceps or the Vectis, and we may then perhaps find many a Forceps in the state of those presented to the Medico-Chirurgical Society by Mr. Cansardine of Woodham, Mortimer Hall, in want of fresh polishing from long neglect." 56.

Of the natural history and description of the ergot of rye, we do not deem it necessary to take much notice. Mr. M. proves that the ergot may be taken in considerable doses without detriment—he himself having swallowed eighteen drachms in fourteen days, without the least inconvenience. At the same time he thinks that half a drachm is quite sufficient for a dose. In respect to the *modus operandi* of the medicine, the following are our author's opinions.

"I consider it to act by contracting the muscular fibre of the extremities, and by causing a greater quantity of blood to be determined to the uterus. Its power is also said to admit of no control: to this I answer distinctly, that opium will be found to stop its effects within a very few minutes. I allow, with Dr. H., that when administered it has created astonishment, but I do not admit that its powers are but imperfectly known, as I have been in the habit of giving it for many years. It has been viewed as inert on mother and fœtus, and the only effect it has on the mother, is to cause deadness on all parts of the body, and on the child nothing more than what arises from the great pressure of the uter-

us. It is stated to be equivocal in its character, whereas there is no medicine that has a more decided effect, not even a purgative—it is also said not to take effect always on the uterus, but to bring on distressing symptoms—my experience has shewn me none of these, except vomiting, which is almost a certain attendant on the rapid dilatation of the os uteri. Another objection is, that when the child is born any length of time after its administration, it is always still-born. This opinion of its effects I consider to be altogether erroneous. The reason why the death of the infant has been attributed to it is, that it is only administered in long, lingering cases, in which it is well known the child is frequently still-born without the exhibition of ergot. It is asserted as a certainty, that it has destroyed life—this I do not credit: I have given it largely and frequently with the best effects, and have in no case apprehended such a result *from its use*.” 74.

The ergot has been said to put both mother and foetus in jeopardy—Mr. M. avers that it has, in his practice; “ saved the lives of many children, and were it introduced into general practice, the death of a woman in child-bed would be rarely or never heard of.”

“Flooding is also said to cause death when ergot is administered; from my experience, I should say, death from flooding, when ergot has been given, can never occur; it is, on the contrary, of the greatest advantage in cases of flooding, and were it only for its virtues in hæmorrhage, it would be a most invaluable medicine.” 78.

We have had the means of knowing that the ergot has proved a very powerful remedy in cases of uterine hæmorrhage lately, in this metropolis, and therefore, we earnestly solicit the attention of our obstetrical brethren to this important subject. Upwards of 30 cases are detailed by the author, and he informs us, that “ an abstract of those he has notes of would fill a large volume.” The general dose is $\mathfrak{z}\text{i}$. in infusion, repeating this quantity according to circumstances. Mr. M. adds one third milk to the infusion, which makes it sit lighter on the stomach.

“I consider the ergot as such an acquisition to my midwifery practice, that I never go without it. I have never once regretted its use, and I invariably find that women recover much better after it than they had done before. If the woman has been subject to flooding, on former labours, I have given the ergot with a view to prevent it, with very good success. It also mitigates the severity of the after-pains, so as nearly to subdue them altogether. Its virtues are not confined to the acceleration of the action of the uterus during labour, it also causes it to contract immediately, and detaches the placenta from the body of the uterus, so that you have never to wait five minutes for its separation. I have never known an instance of adhesion when ergot has been given. I would, however, caution those who are strangers its properties, to take away the placenta directly, otherwise they will find the uterus contracting all around it, and will experience some little trouble in the dilatation of the os uteri. I have several times found the os uteri contracting so firmly, as to oblige me to introduce the finger through it.” 123.

The little volume, besides containing a very interesting dissertation on the ergot of rye, embraces the subject of difficult parturition generally, and ought to be on the library of every obstetric practitioner.

X.

1. *Observations on the Nature and Treatment of Erysipelas, illustrated by Cases.* By W. LAWRENCE, Esq. F. R. S. &c.—(*Medico-Chirurgical Transactions, London, Vol. XIV.*)
2. *Account of the Epidemic Erysipelas which appeared at Montrose and the Neighbourhood in 1822.* By W. GIBSON, M. D.—(*Medico-Chirurgical Transactions, Edinburgh, Vol. III. p. 94.*)
3. *On the Treatment of Erysipelas by Numerous Punctures.* By R. DOBSON, M. D.—(*Medico-Chirurgical Transactions, Vol. XIV.*)
4. *Case of Erysipelas, with some Remarks.* By A. COPLAND HUTCHINSON Esq.—(*Medico-Chirurgical Transactions, Vol. XIV.*)

THE atmosphere of medicine is as easily agitated as that of nature—the vicissitudes which it experiences are as diversified and as multifarious—and although the effects produced are not as momentous in their character, they are neither less curious nor less useful. The uninteresting sameness of routine practice is occasionally varied by the stormy discussions of rival spirits, and the discovery of some new, or the revival of some old improvement, imparts an impulse to our stagnating powers, fans the flame of genius into increased activity, and accelerates “the march of intellect.” Such discussions prove of the utmost service to our profession; for, whether they end by augmenting or diminishing our store of remedies, they must issue in improvement.

During the late meetings of the Medico-Chirurgical Society, a very warm but interesting debate succeeded the reading of the Essay on the Nature and Treatment of Erysipelas, which now occupies our notice; and although personal invective occasionally intermingled with the argument, the importance of the subject excited much attention, and elicited many valuable observations.

The principal objects of this very learned and laboured essay are two;—to inculcate the identity of erysipelas and inflammation, and to recommend, in the treatment of phlegmonous erysipelas, the employment of incisions, as the most speedy and effective mode of cure.

It is well known that erysipelas was considered an atonic affection by some of the most experienced writers of antiquity, and that the doctrine of its essence being inflammation in all cases, is impugned in the works of many modern authors. Hippocrates believed it to arise from acrid humours; Galen, speaking of its diagnosis, says, “non tamen similiter dolet erysipelas ac inflammatio.” and, in obedience to the opinions of these medical fathers, almost every succeeding writer of distinction, until the appearance of La Motte, advocated its humoral pathology. Sennertus says, from genuine inflammation (a vera inflammatio) it likewise differs, because it is accompanied by less tumefaction, pulsates less, and is less tense and shining. But many diseases, which were held to be diseases of debility by the ancients, have since either changed their nature, or are treated in the present day as though they had; and Mr. Lawrence stands eminently forward in

the van of those, who see strength in almost every malady, and thinks the lancet as essential an article of furniture in the sick chamber as the nurse or the night-stool.

Although, however, we hold ourselves quite exempt from the charge of timidity, and can bleed with fearlessness when symptoms demand, we attach no such unlimited importance to this instrument, because we subscribe not to that antiphlogistic creed, which teaches its heroic votaries to wear it as their crest.

"Regarding it," says Mr. Lawrence, "as an affection essentially inflammatory, some adopt the antiphlogistic plan, including general and local bleeding; while others, conceiving that the part, the constitution, or both, are in a state of debility, endeavour to remove this by the free use of stimulants and tonics, more especially by bark, ammonia, and wine. The former appears to me the correct view and practice; I accordingly consider the latter notion completely erroneous, and the treatment founded on it, not only inappropriate, but injurious." 2.

That erysipelas is, *in one sense* of the expression, always inflammatory, there can be no doubt, since many of its external characters are those which accompany and constitute inflammation; but the question and the difficulty are, whether these inflammatory characters are, *in every sense, purely phlogistic*, and invariably admit or require for their removal antiphlogistic measures. It will be admitted that inflammation may exist, and yet the lancet be improper. The pulse may be low, and the constitution may be weak; or the circulation, although excited by the local disease into simulated power, may not endure depletion. The co-existence of local inflammation and general debility is quite compatible with orthodox pathology, and is often realized in actual practice. How frequently do we witness erysipelas supervening upon the close of acute diseases, when the powers of life have been nearly exhausted by active treatment and protracted illness, and when the most strengthening remedies are required and often prove insufficient. In many instances, debility constitutes the essence of erysipelas, and in every case, we believe, there is so much admixture of symptom and of character, as entitles us to hold phlegmonous and erysipelatous inflammations to be essentially different. They attack different habits, invade different textures, are marked by different symptoms, proceed in different stages, admit of different treatment, and issue in different terminations. When we admit that they are bound together by generic symptoms, as affections pertaining to the same genus, we regard them as possessed of specific properties, by which they are entitled to specific characters, and require specific treatment. When erysipelas appears in a good constitution, uninjured by previous disease; when the circumstances attending its appearance have been favourable to sthenic action, and when, in the symptoms by which it is attended, there is little admixture of debility, it may then be regarded as an affection essentially inflammatory, and will require active treatment; but when it involves parts previously weakened by disease, and involves them *in consequence* of that very weakness, as in anasarous extremities; or, when it appears in the erratic form, flying like a consuming flame from surface to surface, over a worn-out system, we cannot imagine an excuse for a principle, which teaches the immutable character of erysipelas under all circumstances, its sameness with acute inflammation, and the expediency of a more or less rigid antiphlogistic treatment.

Using erysipelas as the generic term, he observes:—

"When it affects the surface of the skin, which is red, not sensibly swelled, soft, and without vesication, it is called *erythema*. *Simple erysipelas* is a more violent cutaneous inflammation, attended with effusion into the cellular substance, and generally with vesication; *phlegmonous erysipelas* is the highest degree of the affection,

involving the cellular and adipose membrane as well as the skin, and causing sup-puration and mortification of the former." 2.

In the *simple variety*, the skin is red and shining; the colour, which varies from a rosy tint to a bright scarlet or livid red, disappears on pressure, but soon returns when pressure is withdrawn. The inflamed parts are hot and painful, but the pain is more constant and less acute than in pure inflammation. It is more smarting than lancinating—more ardent than pungent. There is little tumefaction and no tension, until the cellular tissue be involved, when effusion taking place, causes swelling, tension, and a shining surface. This infiltration is seldom, however, confined within the cellular texture, when the erysipelas becomes severe; it more frequently elevates the cuticle into vesicles or bullæ, similar to those produced by cantharides, which are usually of a straw yellow colour, but differ occasionally in appearance, according to the nature of the fluid they contain, which may be either purulent or bloody. When these serous collections arrive at their maximum size, they burst, their contents form crusts which soon exfoliate, and the blistered surface seldom passes into ulceration. Gangrene is a rare occurrence, and if the inflammatory action be equally diffused, suppuration is seldom witnessed.

One of the most peculiarizing symptoms of erysipelas, is its tendency to spread. In consequence of this property it has received its name. Sometimes it moves about from surface to surface, without passing through all its stages in any. To-day it appears upon the back, to-morrow upon the abdomen; now upon the head, then upon the extremities, and while its visits are so numerous, they are generally short.

When is this travelling *penchant* observed in true inflammation? A texture is selected from some predisposing quality, increased action is commenced, and the part which is first exposed to the kindling flame, is usually the last to witness its extinction. But erysipelatous action prefers surface to substance, and the varieties of liberty to the uniformity of confinement.

The constitution almost invariably sympathises with this local action. There are shiverings, alternated with heat, torpitude, head-ach, anorexia, foul tongue, nausea, and costiveness. When the head is the part affected, sleepiness is a common, and coma or delirium not an unfrequent symptom; the tongue is likewise more foul, the strength more depressed, and the pulse less powerful.

The *phlegmonous variety* differs principally from the simple form in the greater intensity of its action, and more violent character of its symptoms. The redness of the integuments is deeper, and often mottled—the tumefaction is greater, and pits slightly upon pressure—the appearance of vesications is uncertain—destruction of the cellular membrane soon begins—the skin becomes livid, and studded with phlyctenæ, and the general symptoms are materially aggravated. When an entire limb suffers, the cellular texture suppurates and sloughs, detaching the skin, penetrating between muscles, inflaming the synovial membranes of contiguous joints, ulcerating their cartilages, producing ankylosis, and occasionally caries of the bones. The absorbent glands are generally enlarged, and the neighbouring lymphatics tender.

"An inflammation of such extent and violence cannot fail to excite the most serious sympathetic affections, among which may be mentioned disturbance of the nervous system, causing symptoms of typhoid character, inflammation of the lungs or pleura, of the intestinal mucous membrane, producing diarrhœa, or of the peritoneum, and inflammation or suppuration of other organs. The combination of the primary and secondary affections is speedily fatal. If, however, the patient should recover after tedious sup-

purations and discharge of sloughs, the parts, which have been inflamed, are so changed in structure, and skin, fascia, muscles, tendons, and bones are so unnaturally agglutinated and fixed, after the extensive destruction of the connecting cellular texture, that the motions of the part are permanently and seriously impaired." 13.

The skin and cellular texture are the seat of erysipelatous inflammation, but it is a circumstance somewhat singular, that pus is found more frequently in the tela cellulosa adjoining the fasciæ or muscles, than in that which is exterior to the aponeurotic expansion.

"If, which is doubtful, Mr. Hutchinson means that the fasciæ or aponeuroses, properly so called, are the seat or principal seat of the disease, I cannot agree with him, having always found them unaffected in examinations after death, and seen no symptoms referrible to such an inflammation during life. They may indeed become involved in the disease, when it is violent; and they must suffer partially when it extends to the intermuscular cellular structure; but they are not primarily affected in these cases, while, in the majority of instances, they do not suffer at all" 16.

But there can be no doubt as to Mr. Hutchinson's meaning, for his language is too unequivocal to admit conjecture. Speaking of Erysipelas phlegmonodes, he says—"that species of the disease at present under review is, I am persuaded, confined chiefly to membranous parts, such as the aponeurotic expansions, skin, sheaths of tendons, muscles, &c." p. 114, (*Surg. Observat.*); and although Mr. H. is supported in this assertion by Earle and Arnott, we agree with the author in believing, that the fasciæ are merely involved by consequence, and only in cases unusually severe. The cellular tissue is of a softer and less resisting texture than fascia, which can withstand an action that would be destructive to the former; and it is undeniable that we often find, upon dissection, tendons and aponeuroses entire and unhurt, when the surrounding fat and muscles have wholly disappeared. From the nature and position of the parts subject to erysipelatous action, it must be obvious that any division of this disease, depending for its accuracy upon the individual texture involved, must be more fanciful than just. The skin and subjacent cellular structure are so immediately connected, that the one cannot be long or seriously affected without implicating the other; and when we consider that action does thus pass and re-pass by insensible shades into contiguous organs, its character in either cannot be very different, and the treatment to be pursued in both must be materially the same.

In accordance with the principle, that erysipelas and inflammation are one, Mr. L. argues strenuously against those who maintain the former to be possessed of specific characters.

"I can, however, by no means, agree with those who regard it as a distinct species of inflammation, and as capable, in that character, of affecting various parts of the body as well as the skin. Some writers have referred to erysipelas certain inflammations of the conjunctiva, mouth, and fauces, of the respiratory and alimentary mucous surfaces, of the serous membranes in the head, chest, and abdomen, and of the brain, abdominal and thoracic viscera. The proof of such an opinion would consist in shewing that the same peculiarities, which distinguish erysipelas from other inflammations of the skin, are found in certain inflammations of the parts just enumerated, and that such affections may hence be distinguished from ordinary inflammations of the same organs." 21.

A priori, we see no conclusive reason why a disease, so partial to superficial structure as erysipelas evidently is, should be confined to the external surface of the body. We know of no prescriptive right by which the external integuments have appropriated this affection, and many acute and experienced observers have recorded instances, without number, of internal parts having betrayed every specific symptom of erysipelatous action. Mr. L. admits that—

"The texture of mucous membranes presents indeed some traits of analogy to that of the skin, and there is a corresponding conformity in some of the morbid phenomena. Thus, so far as organization is concerned, we might suppose that mucous membranes would be susceptible of erysipelatous inflammation; but we see nothing that is clearly referrible to this head, either during life or in examinations after death, although these membranes and the skin exert over each other, in many cases, a powerful sympathetic influence." 22.

If a diffused redness, accompanied with a hot or smarting pain, appearing and disappearing without completing any definite period, or terminating by any marked crisis, be signs of erysipelas, they have been often witnessed in the mouth and fauces; and if these symptoms have appeared upon the subsidence of erysipelas of the face, or have vanished upon its appearance, it must be admitted that we have strong presumptive, if not positive evidence. Cases have been recorded by Dr. Abercrombie, in which the lining membrane of the nostrils formed the medium of communication between the internal and external inflammations; and Dr. Stevenson has furnished us with many histories illustrating the same communicability of action. Some have thought that diarrhoea, puerperal fever, and ophthalmia, often arise from the same cause; and others have gone so far as to maintain that the solid viscera are not exempt from its influence. But, without stretching our theory to such an objectionable length, we must, at least, allow facts, fairly stated and unexceptionably attested, to make that impression, and meet with that respect to which they are entitled. To the absence of vesication, and even of visible inflammation, in parts suspected of this disease when examined after death, we attach no importance; because Mr. L. admits, and every tyro knows that the former is not essential, and that the latter can be seldom noticed even on the external surface, the inflamed parts having returned to their natural colour.

But some are much more restrictive in their views of erysipelas than Mr. Lawrence. Mr. Arnott, for example, would confine it to denote inflammation of the integuments of the face, because he considers that this form of the disease is contagious, runs a specific course, and is attended with sensorial disturbance. The following judicious remarks form a sufficient reply to these objections:—

The affection of the sensorium and the fever seem to me to arise from the brain participating in the inflammatory excitement of the contiguous and connected parts. Should we not expect *a priori* that erysipelas of the head would produce much more severe sympathetic effects than that of a limb? Making the necessary allowance for slight difference of structure, the inflammation itself is exactly alike in the two cases; there is no difference in the appearance of the skin during life, nor in the changes observed after death. The facts related and cited by Mr. Arnott lead, on the first view, to a strong suspicion of contagion; but in order to justify on this ground the marked distinction which he has drawn, it would be necessary to show that erysipelas of the face is, and that erysipelas of other parts is not, contagious; neither of which points is hitherto proved." 25.

In settling the nosology of erysipelas, the author is naturally led to examine the arrangements of various writers; and we think that he rejects with justice the classifications of all. Nothing, certainly, can be more confused than Cullen's disposition of the different species of this affection. Erythema he places among the phlegmasiæ, and erysipelas among the exanthemata; dividing two shades of the same action, to be often, if not always, seen more or less together in the same case, into orders, separated by the most distinctive characters. J. P. Frank has placed erythema among the impetigines, and erysipelas among the exanthemata; whereas Willan and Bateman class erythema with the exanthemata, and erysipelas with

the bullæ; and, although Rayer has improved upon his predecessors, by ranking them together, he introduces them into the same order with miasm and small-pox, from which they most essentially disagree.

"In a natural nosology, erysipelas would be classed among inflammations of the skin and cellular texture, and would follow erythema, to which we should refer slight superficial and partial inflammation, without vesication, generally without swelling or fever. This slight inflammation may extend into the cellular membrane, and be attended with swelling, as in the erythema nodosum of authors.

"Of erysipelas which may be called spreading inflammation of a considerable portion of the skin, with diffuse redness and swelling, sometimes preceded and generally accompanied by fever, it would be sufficient to admit three species; namely,—

"1. *ERYSIPELAS SIMPLEX*; superficial spreading inflammation of the skin, with bright scarlet or rosy redness, and soft tumefaction of the part, generally with vesications and fever.

"Synonyma.—True or genuine erysipelas.—*E. exanthematicum*, or *verum*. (Rust, on erysipelas of the face.)

"Varieties.—*Acutum*; *chronicum*; *periodicum*; *habituale*; *perstans* or *fixum*; *ambulans* or *erraticum*; *saltans* or *volaticum* (disappearing from its original seat, and re-appearing in a distant part); *miliare*, *vesiculosum*, *bullosum*, *phlyctenodes*; *idiopathicum*, *traumaticum*, *sympatheticum*, or *symptomaticum*, *bilionum*, *gastricum*.

"2. *E. EDEMATODES*; the swollen part dark red, and pitting on pressure.

"3. *E. PHLEGMONOSUM*; acute inflammation of the skin and cellular texture, with firm, general, and deep red swelling of the affected part, ending quickly in suppuration and sloughing.

"Synonyma.—Diffuse cellular inflammation (Earle.) *Inflammation of the cellular texture* (Arnott.) *Diffuse phlegmon* (Baron Dupuytren.) *E. spurium* or *pseudo-erysipelas* (Rust.) *Phlegmon erysipelatous*." 36.

We believe that this classification will serve every useful purpose, and, while we cannot esteem erysipelas as pure inflammation, we hesitate not to adopt the arrangement, which inserts it in the list of inflammatory diseases.

The causes of erysipelas are various, but may be divided into such as act directly upon the seat of disease, and such as excite it by sympathies or intermediate agents. Among the direct causes are all external irritants, as heat, cold, blisters, issues, setons, caustics, wounds, more especially those received in dissection, bruises, ulcers, and other local diseases; while improper diet, chylopoietic derangements, and contagion, pertain to the second class.

The nature of a review will not permit us to enter into the question of contagion in erysipelas, or we should feel pleasure in investigating a subject of so much interest. But the almost entire silence of Mr. Lawrence will be our excuse for a few observations.

In Dr. Stevenson's paper on erysipelas, in the 2d volume of the Edinburgh Medico-Chirurgical Transactions, 21 cases are briefly given, almost all of which seem linked to each other in the mutual relations of cause and effect. The mother of a family, who is the subject of the first case, is taken ill on the 26th of October, her son is affected on the 7th of November, the person who attended her on the 23d of the same month, and her daughter becomes ill on the 25th. The sixth case frequently visited No. 5, the 7th No. 6, the 8th No. 5, the 9th and 10th attend No. 7, and the 9th, who went home, communicated the complaint to her family, and her mother died. In a third series, a Mrs. F. became ill on the 12th of August, her son-in-law sickened on the 30th, her sister on the 17th of September, her nephew on the 1st of November, and on the 1st of December her brother was confined. These are followed by six examples occurring among relatives, where unrestrained intercourse had been maintained.

These interesting cases are alluded to by Dr. Gibson, in his paper at the head of this article, as seen by him in company with Dr. Stevenson; and "the appearance and history of which convinced him that the disease, as it then prevailed in Arbroath, was of a contagious nature." p. 94. Dr. Gibson likewise furnishes several cases very similar. An infant son of a gentleman at Montrose was seized with erysipelas of one foot, the mother became affected upon his recovery, his nurse, being seized with symptoms of pneumonia, went home, a distance of four miles, and her father, who had been some days before wounded in the scalp, was attacked with erysipelas of the wound, and died; a sister, living in the same cottage, sickened, and two children were cut off by what *seemed an attack of croup*. After having attended a gentleman who died with erysipelas, the Dr. was called upon to see a maid-servant of the same house. Finding her to have the same disease, she was sent to her mother's. The mother, in about ten days after her daughter's arrival, was seized with violent febrile symptoms and sunk; and another maid-servant, who had removed the bed-clothes after the gentleman's death, complained of heat and uneasiness in her arms and hands. On inspection they were found red and swollen, but the disease did not spread further. The following extract is very conclusive.

* "In 1824, Christian Taylor, from the parish of St. Cyrus, was admitted into the infirmary here with abscess of the hand and caries of the bones of one finger. Some days after her admission, the patients in the two beds next to her were seized with erysipelas, and, on inquiry being made, it was ascertained that the suppuration in Taylor's hand had followed an attack of erysipelas, which had been prevalent in that parish. The patients were all removed from that ward, and it was well cleaned, white washed, and fumigated. Yet, when patients were placed in that ward, the disease again made its appearance, and it was found necessary to remove the whole patients from our little infirmary, and to take every precaution, before the contagion was eradicated." 99.

Were further instances necessary, we might add many from Dr. Wells, Mr. Arnott, and our own experience; but, believing that if any thing can be proved by cases, plain and obvious facts are as good as arguments; and so we leave the reader to draw the only conclusion which, in our opinion, these facts can sanction.

Mr. Lawrence neglects mentioning foul air and the effluvia of putrid matter in his catalogue of causes, and we are convinced that in many cases erysipelas can be traced to this origin. We have seen neglected night-stools occasion severe attacks, and; without entering into any laboured defence of such an opinion, suffice it at present to observe, that we have several reasons for believing hospitals would be less frequently visited with such a scourge, were all the dejections passed in water and removed immediately they were voided, and were the apartments of the sick preserved in a purer state of ventilation and cleanliness. There are so many points of resemblance between erysipelas and hospital gangrene, that some authors consider them species of the same genus; and we well know the influence which a confined and adulterated atmosphere exerts in predisposing to and producing hospital gangrene. Like it erysipelas is frequently constitutional and epidemic, depending upon general causes, and disappearing under general treatment; and, although it is often excited by local circumstances, and yields to local remedies, it is not a rare occurrence to find it arising from polluted air, filth, and negligence. Hence do we see it haunt certain situations, and select certain hospitals for its own, where no peculiar cause is known to operate, save the contaminated air of a bad locality. St. George's Hospital in London, and the Hôtel Dieu in Paris, afford marked

examples of this fact ; for it is notorious, that seldom are the wards of either free from cases of erysipelas. Soubere informs us that this disease is so frequent in Siam, that nineteen out of twenty persons are generally attacked by it. In 1716 it was epidemic in Thoulouse ; in 1822 in Montrose ; and Bromfield says it was epidemic for two years in St. George's Hospital.

With these obvious and well authenticated facts in view, how can we adopt Mr. Lawrence's language, when he says, that there is really *no difference*, as to the causes of erysipelas, between it and other inflammations ; p. 36. Who ever said pleurisy was contagious, or hepatitis originating in contaminated air ? No ; there is something very essentially different in the symptoms, in the causes, in the nature, in the progress, and in the treatment of erysipelas from pure specimens of inflammation. For the sake of simplifying our nosology, let us not confound diseases, for if our diagnosis be unphilosophical, our treatment must be unsafe. Because two affections have a few points in common, we are not to conclude that the portrait of one will faithfully represent the qualities of the other ; and, although erysipelas wear family features of the phlegmasiæ, in the redness, heat, pain, and tension, that accompany it, it asserts its own individuality by many characteristic lineaments.

We have considered it our duty thus far to animadvert upon some of the principles contained in the first part of this Essay, because, in addition to the intrinsic importance of the disease in question, and the anxiety which we feel to have it better understood, names now-a-days are imposing arguments, and authority is frequently advanced as a substitute for fact. The talents which ornament, and the learning which distinguishes the author of this paper, will, we doubt not, be held by many as sufficient passports for the sentiments it contains ; and, as error is more dangerous the more nearly it is made to resemble truth, so doctrines, advanced by genius and advocated with ability, should be considered with a caution proportioned to the adventitious recommendations with which they are introduced. And, as we now pass on to Mr. L.'s observations on the treatment, we may once for all remark, that, seeing we differ somewhat in our pathology, we cannot agree entirely in our therapeutics. Not that we oppose active measures, on the contrary they are often necessary ; but because, holding erysipelas to be a modified inflammation, an inflammation as frequently marked by typhous as phlegmonous symptoms, we cannot warrant the adoption of such antiphlogistic measures as are required to subdue synocha. A modified or mixed inflammation requires a modified or mixed plan of cure ; and, although we would bleed, and purge, and starve, we would likewise stimulate, strengthen, and support. Phlegmonous erysipelas in an athletic habit will create symptoms widely different from typhoid erysipelas in an old or broken constitution ; yet, while we believe that the lancet will be useful in the one and destructive in the other, we would, as a general rule, deprecate the same liberal employment of it, which pure inflammation sanctions, convinced that the patient who labours under erysipelas of any form, cannot endure the same extent of depletion with him who is attacked by cephalitis or pneumonia. There is a *something* peculiar to the nature of erysipelas, and whether that peculiarity arise from something in the texture subject to this affection, or exist as an essential to its very being, we pretend not to determine. We have seen that Mr. Arnott regards erysipelas of the face distinct from that occurring in any other part ; and, as almost every organ has diseases peculiar to itself, we know of no reason why the skin may not be subject to an inflammatory variety, "*sui generis*."

Not being the advocates, therefore, of any exclusive system, we cannot sanction the following general language.

"As this affection resembles other inflammations in its causes, symptoms, and effects, so it must be treated on the same principles; that is, on the antiphlogistic plan. Venesection, local bleeding, purging, and low diet are the first measures, to which saline and diaphoretic medicines may be afterwards added. The earlier these means are employed the better: vigorous treatment in the beginning will often cut the attack short, and prevent the disease from spreading beyond its original seat." 40.

We repeat it, that many cases will occur wherein it must prove fatal to adopt vigorous treatment, even in the beginning. The symptoms do not call for it, the system will not allow it, prudence forbids it, and experience will condemn it. But, although this sentence is couched in such general phraseology, the author very prudently modifies the precept it conveys in a subsequent passage.

"I do not mean to recommend that measures equally active, and, in particular, that bleeding, whether general or local, are to be employed in all cases. In young persons, in the robust and those of full habit, in instances where the pulse is full and strong, or when there is head-ache and white tongue, in erysipelas of the head attended with symptoms denoting affection of the sensorium, and more especially in the very beginning of the affection, venesection will be proper, and it may be necessary to bleed largely, to repeat the evacuation, or to follow venesection by local abstraction of blood. Under such circumstances, the other parts of the antiphlogistic plan must be also employed, that is, the alimentary canal should be cleared by an active purgative, which may be followed by salines and antimonials, with the occasional use of milder aperients; and low diet should be enjoined. Nothing can be more different from such a case, than that of an elderly person with a small and feeble pulse, in the advanced stage of the disease. The interval between these extremes is filled by numerous gradations requiring corresponding modifications of treatment. The antiphlogistic plan itself embraces a wide range in point of degree; from blood-letting, local and general, with purging, vomiting, the free use of mercury and antimony, and low diet, to the exhibition of a mild aperient, with some saline medicine. The treatment of erysipelas, like that of any other inflammation, must be modified according to the age, constitution, previous health and habits of the patient and the period of the complaint. In asserting generally that the antiphlogistic treatment is proper, I speak of the beginning of the disease, when the original and proper character of the affection is apparent; and I am decidedly of opinion that, in some shape or degree, such treatment will always be beneficial in that stage. In many instances active antiphlogistic measures are of the greatest service in lessening the severity both of the local and general symptoms. In others the administration of calomel with aperients, and of diaphoretics with low diet, will be sufficient. When the affection occurs in old and debilitated subjects, the powers of life are soon seriously impaired, and our efforts must be directed rather towards supporting them, than combating the local affection. I have often seen such patients labouring under erysipelas of the face in its advanced stage, with rapid and feeble pulse, dry and brown tongue, recovered, under circumstances apparently desperate, by the free use of bark and wine." 42

Except in remarkably acute cases, where every attending circumstance is favourable to depletion, we would prefer local to general bleeding. Ten ounces of blood abstracted immediately from the affected part, will generally produce a much greater and more salutary impression than a double quantity drawn from the system at large; with this material advantage in its favour,—that the strength is not unnecessarily spent, nor the stage of convalescence injuriously prolonged. The superiority of such treatment we have frequently witnessed, and, while we would avoid the charge of inconsistency, in using terms, the universality of which we have just disapproved, we fear not the consequences, either to patient or practitioner, when we unqualifiedly recommend topical depletion. The lancet may be

safely applied as a local remedy, when it might be fatal if taken up for a general purpose. Even in those typhoid cases, where the pulse is scarcely to be felt, where muttering and delirium prove the extent to which the nervous system suffers, and where wine and bark and nourishment must be used with an unsparing hand, leeches may be applied, and applied with benefit. The general disorder and local disease mostly *play into each others hands*, and while his sinking powers require support, the patient will frequently be improved by such means as are calculated to remove the source of mischief.

From the well known fact that leeches have occasionally induced erysipelas, they have fallen into very general but undeserved disuse in the treatment of this disease. There is certainly nothing essentially irritating in their bites, otherwise this application should be more frequently succeeded by such consequences. They act, like any other exciting cause, by calling forth a disease to which the part is predisposed, and which would, probably, follow the puncture of a lancet as readily as that of a leech. How often do we see erysipelas of the surface on which cupping-glasses have been applied, and its appearance upon the arm after bleeding is not a rare occurrence! Leeches will be found in many cases very beneficial. They may be used where glasses could not, or should not be employed; and, except in very irritable habits, they are generally followed by relief. The erythematous form is that to which they seem best calculated, the inflammation is cuticular, the cellular structure is seldom or slightly affected, and a trifling detraction will be sufficient to effect every useful purpose. Glasses are attended with many serious disadvantages. The size and situation of the parts diseased will often preclude their application, and the pressure with which they act is most painful and injurious. If a small quantity of blood be required it can be drawn by leeches, if a large one, by incisions. Suction is not necessary to procure blood from an erysipelatous surface. The cutaneous vessels are so active that their division merely is necessary; simple incisions are, consequently, quite sufficient, and the violence occasioned both to the feelings of the patient, and to the textures of the part is avoided.

Mr. Lawrence has taken more trouble than was, perhaps necessary to collect testimony for and against the antiphlogistic plan of treating erysipelas. He enumerates Sydenham, Cullen, the two Franks, Dr. Duncan, Richter, and Vogel, among the first class; and Drs. Fordyce, Wells, Willan, Bateman, Carmichael, Smith, Thompson, and Pearson, among the second. But these lists are equal in number, and in reputation so little different from each other, that neither party can claim victory, authority furnishes no certain conclusions, and we must still consult reason and experience for our rules of practice.

"The direct opposition, both in opinion and practice, which the preceding quotations disclose, must appear very extraordinary, and not calculated to increase our confidence in medical doctrines. I see no mode of reconciling the difference. It is true that erysipelas goes through a certain course, and ends by resolution in many cases, not requiring any active treatment. Bark and ammonia would probably not materially alter the character and progress of the affection: it may be reasonably doubted whether these remedies, more especially the former, have so much influence on the system, as we are inclined to believe." 58.

But such conflicting authorities should not have created amazement in one who observes so attentively as Mr. L. Erysipelas does not invariably wear the same symptoms, or permit the same treatment. Difference of sentiment is, therefore, the necessary result of difference of character; and,

although something may be attributed, no doubt, to the inefficacy of every curative mean in some cases, the difficulty, we presume, receives the principal part of its explanation from the fact now stated. Celsus would always bleed; yet Avicenna denounced the lancet. Alexander of Tralles confined his treatment to cold water, and Oribasius exhibited antibilious medicines. Yet these authors may have been as successful in their practice as we, who too often regard unanimity as the test of truth.

"Although Desault restricts the use of emetics to what he calls bilious, in contradistinction to phlegmonous erysipelas, I do not consider them sufficient, as the principal means of treatment in many of those cases. They are, however, useful, after the abstraction of blood, where the tongue is furred and nausea or sickness is present. When the latter symptoms are not accompanied by much febrile disturbance, the emetic plan may be pursued, and followed by aperients and diaphoretics. The liquor antimonii tartarizati may be given in the dose of half an ounce every half hour, until the stomach is cleared. This may be followed by calomel and aperients.

"Under the like circumstances, that is, when a white tongue and other symptoms of disordered digestive organs remain after the use of evacuations, the local disease continuing, the free use of calomel alone, or combined with James' powder, is very advantageous: it acts copiously on the bowels, cleans the tongue, and improves the state of the stomach. Two, three, or four grains of calomel, either alone, or joined with two or three grains of James' powder, may be given every six hours, for one, two, or three days. The hydrargyrus cum cretâ might be used in the same way." 59.

The condition of the alimentary canal should be carefully watched in erysipelas, for we have long suspected that it arises more frequently from its derangement than the generality of the profession are aware. Excrementitious matter allowed to putrify in the fæcal tube will not only operate as an irritant upon the whole system, but, from the close and constant sympathy which holds between the cuticular and mucous surfaces, may be expected to exert a deleterious influence more immediately upon the skin. Hence the erysipelas *biliosum* and *gastricum* of many writers. In the concluding stages of putrid fever, where the bowels had been long neglected before assistance was procured, we have seen the most tedious and inveterate forms of this disease; and, although the removal of this irritation by gentle and continued laxatives did not arrest the progress, it certainly diminished the violence of the symptoms.

"When the means now detailed have arrested the inflammation, the patient is probably reduced in strength, and may seem to require the aid of good diet and tonic medicines. Medical practitioners in general are anxious to begin the strengthening plan; they seem to have the fear of debility constantly before their eyes, and lose no time in directing the employment of bark, and recommending animal food with beer or wine. In this way relapses are frequently produced; the inflammation and fever are renewed, further local mischief is caused, and recovery is retarded. When indeed the redness and swelling of the part are gone, when the pulse is quiet, and the tongue clean, that is, when the patient is well, there can be no great objection to the bark. The natural powers of the system quickly restore its strength, when the disease has been stopped by active treatment; in such cases strengthening medicine and regimen are not required. In others they must be used with the greatest caution. Sometimes they are at once obviously injurious; in others they do good at first, but soon cause a return of the complaint if persevered in. It is safest, therefore, to leave them off as soon as the state of the pulse, or of the other symptoms, which have indicated their employment, is changed. The subcarbonate of ammonia is the best medicine in those cases, in which we doubt whether stimuli should be employed or not. It may be given without any risk of reproducing inflammation, while in most cases it is decidedly advantageous. Five, six, or eight grains may be administered in a draught every three, four, or six hours. Dr. Peart and Mr. Wilkinson regard it almost as a specific in scarlet fever and erysipelas.

"Bark comes next in order to the volatile alkali; and the sulphate of quinine is the most eligible form of the remedy. Wine is sometimes necessary; but it should be used very sparingly, and discontinued as soon as the necessity has ceased." 61.

Some parts of the above extract are expressed in the favourite language of our author; but, however ridiculous the tonic plan may appear in the eyes of Mr. L. the success with which it is attended in cases that are without remedy, if an opposite treatment were adopted, proves its suitability to nature, and furnishes a voucher in its favour superior to the asperity of sarcasm. If the distinguished authors whom we have lately quoted as opposed to active treatment, had *the fear of debility constantly before their eyes*, their rank and respectability will shield them from the imputation of being ignorant of symptoms, and of trembling for "a lion in the way" where there was neither difficulty nor danger. We believe, in opposition to Mr. L. that *when the patient is well there are great objections to the bark*, or, indeed, to any other medicine. Health requires no remedies, and he, who has no ailment to lament, has a fairer chance of being injured than improved by quackery. The sulphate of quinine will be found in many cases a most valuable salt. In this instance we happen to have Mr. L.'s experience and authority against himself.*

Bark and wine improve the secretions, give a firmness to the pulse, and support the strength. They thus act upon the disease by invigorating the general powers; for the pulse becomes slower and more firm, the temperature falls, the tongue cleans, the thirst subsides, better nights are enjoyed, and the mind gradually regains its lost or injured faculties. We believe, however, that stimuli, even in these cases, may be too long, although they can seldom be too soon employed; and we have more than one reason for inculcating with the author the propriety of omitting them, whenever the effect for which they were intended is produced.

A very extensive variety of local applications have been tried. Those who imagined erysipelas to depend upon an acrid state of the fluids, prescribed absorbent powders and demulcent cataplasms; others, believing it to arise from debility, used stimulating ointments and astringent lotions, while a third order of pathologists, to whom Mr. L.'s views would have been more agreeable, advised refrigerating mixtures to abstract heat, and blisters to subdue action. One applied warmth for the same reason that another applied cold—to make his patient comfortable; and he, who hoped to neutralize the acridity of the fluids by absorbent earths, was guided by similar motives with him, who fancied that soothing unguents would render harmless what he thought it was impossible to remove. But the fruitlessness of all such practice is abundantly established by our daily abandonment of old and introduction of new medicaments; and we concur with the author, when we ascribe their principal value to the relief which they occasionally bring to the feelings of the patient.

With this view cold applications are, in general, calculated for the commencement, and warm ones for advanced periods of the disease. The burning heat of the first stage is allayed by the former, while the latter diminish the tension and sensibility which accompany more matured action. Dr. Peart highly recommends a lotion of equal parts of sugar of lead and subcarbonate of ammonia.—3j. of each to Oj. of water; and Mr. Wilkinson's testimony confirms its efficacy. Through the advice of a friend it has been tried by us. In one case it certainly hastened desquamation, but the mind

* See the last six lines of extracts in page 369.

became much deranged upon the decrease of the inflammation, and, at the close of the attack, we could neither say it had been much alleviated, or abridged.

"The application of blisters to the inflamed surface employed in France, has been sanctioned by the high authority of Baron Dupuytren. The phlegmonous and the erratic species of the complaint, more particularly the latter, have been thus treated. In a surgical thesis, printed at Paris, the following summary of the treatment, adopted by Baron Dupuytren in erysipelas, is said to have been taken from his clinical lectures:—

"If the skin be red, tense, dry, and hot, with fever, (*éréthisme général*)—if the tongue be dry and red, a blister or an emetic would do no harm—bleedings and leeches are proper. In a bilious constitution, with the tongue covered by a yellow mucous coat, and bitter taste in the mouth, with pains in the head, and bilious evacuations, an emeto-cathartic, or the tartrate of antimony in a large quantity of fluid is indicated. When the tongue is moist and slightly red, the skin moderately tense and hot, when there is local inflammation with little general reaction, the erysipelatous phlegmon should be brought to a crisis by suppuration, excited externally, by one or more blisters. If the local inflammation have a languid atonic character, without symptoms of sanguineous or bilious plethora, if, in short, the state of debility be well marked, which will happen particularly in old subjects, we must immediately resort to tonics."

"The author of this thesis observes, that the application of blisters is not safe when the head, chest, or abdomen is affected; that a blister applied to the neck caused delirium and death; and that a patient died on the following day in consequence of one having been placed on the chest. He states, that in the year 1818, these affections generally ended in suppuration, and that the use of blisters was not so advantageous in that year." 63.

They were extensively applied by Thevenin, but as often in the neighbourhood as upon the diseased surface, with the design of diverting elsewhere the peccant humours. Rayer discountenances them, Roche and Sanson recommend them only when the erysipelas is much disposed to spread, in order to detain it in one spot. Dr. Duncan speaks rather favourably of them, and has never known them to occasion gangrene. In his case of Morand they were decidedly useful. Mr. Hutchison has seen the progress of one case arrested by encircling with a blister the affected limb, just above the seat of action; and Mr. Lawrence has tried them three or four times, in simple erysipelas of the extremities, with the effect of stopping the march of the inflammation; but, having used other means at the same time, he could not determine how much value belonged to them. They did not, however, produce suppuration, or any other unpleasant consequence.

Compression has been employed by some, especially the French, but with such different results, that the value of the treatment cannot as yet be estimated. In France it has been highly spoken of; in British practice it has not answered the expectations which the eulogy of Velpeau had excited. But, while we do not think highly of such an application, we apprehend that some explanation for our want of success may be drawn from those cases wherein it, has been followed by a fatal termination. In Dr. Nelson's case, as given by Dr. Duncan, the inflammation was more of the phlegmonous than of the erysipelatous kind. The patient, who was a country servant-maid, of middle age, was in a *very strong fever, the pulse remarkably strong, and the tongue very foul*. As might have been anticipated, the bandage produced excruciating pain soon after it was applied, the arm *became much swoln and inflamed*, several vesicles containing a dark coloured fluid had arisen, her mind was greatly depressed, and she died on the second morning after. Now, we do think, that to compress parts in such an active state of phlegmonous inflammation, was highly injudicious

and could not have been succeeded by less forbidding consequences. The lancet, not the roller, was the proper remedy. Again in Mr. Lawrence's case, the patient presented symptoms of a very unfavourable character before the bandage was applied, but there can be no doubt that his death ought to be directly referred to the treatment. He was between 50 and 60 years of age, of a spare habit, and much broken down by misfortune and disease. His pulse was easily compressed, his features sharp and anxious, the integuments of the affected part were of a dusky red, and pitted under pressure; the disease not merely occupied the entire arm, but covered the postero-lateral part of the trunk, and his mind had been confused the night before Mr. L. saw him. Of course, under such circumstances active treatment was to be prescribed, and it appeared to the author a *fair case* for trying the bandage. Through some misunderstanding or neglect, on the part of the attendants, the roller was allowed to remain upon the limb, contrary to the directions left them—

“A period of about twelve hours, although severe pain had come on within two hours from its application, gradually increasing in intensity, with burning heat of the part, and the greatest restlessness, so that the patient endured greater agony than he had ever experienced, and passed a most dreadful night. We found the limb in a condition of universal vesication from the fingers to the shoulder joint, as if its whole surface had been covered with a blistering plaster, which had acted with the greatest effect. One large bladder covered the back of the hand; there were other similar ones on the fore-arm and arm, and all the intervening cuticle was separated from the skin by a thick yellow jelly. A large bladder in the middle of the fore-arm contained bloody serum, and the subjacent cutis was livid. Over the entire surface of the arm, fore-arm, back of the hand and fingers, not a particle of sound adherent cuticle was to be seen. In short, the bandage had acted as the most violent local irritant, and had decided the chances already much against the patient.” 197.

To remedy, if possible, this oversight, an incision was made through the skin and adipose substance, for *nearly the length of the fore-arm*, from which about 20 ounces of blood were lost, and great relief obtained to the feelings of the patient; but he gradually sunk, and expired in the evening.

It is obvious that no conclusion can be drawn from this case, as to the propriety of bandaging erysipelatous parts. The gross neglect of the attendants, aided by the enfeebled state of the patient's health, is more than sufficient to account for the result, and we only wonder that 12 hours torture occasioned by the roller, left surgery a second opportunity of attempting relief. If bandages are to be employed, let them be tried in cases where œdema and other symptoms of local debility are apparent. Pressure may, perhaps, in such instances, assist absorption, prevent the extension of disease, and give an artificial tone to parts which require support. But, in patients labouring under active inflammation, and in constitutional sinking under accumulated misery, we should expect nothing good from a treatment that promises nothing.

In phlegmonous erysipelas depletion may be carried farther than in the simple, or œdematous varieties. The symptoms approach more nearly to those of pure inflammation, and their greater activity requires more active measures. Yet it should never be forgotten that, as a general rule, the local abstraction of blood is more safe than venesection, and not less serviceable. But,—

“If we do not cut the disease short in its earliest stage by this kind of treatment, or if, as very frequently happens, we do not see the case until the inflammation is fully established, perseverance in direct depletion is of little avail in checking its further progress. The inflammation will now pursue its course, both in the cellular membrane and skin, in spite of bleeding, whether general or local; suppuration

and sloughing speedily supervene, and these destructive processes soon extend over a large portion of a limb. Indeed I have found that venesection exerts but little influence over inflammation of the cellular texture, and therefore recommend its occasional employment, not so much with the view of arresting the local disorder, as on account of the feverish symptoms when they are considerable." 67.

We have now arrived at that part of the Essay, in which Mr. L. introduces to the notice of his readers a plan of cure in phlegmonous erysipelas, which has lately excited much interest, and which it was partly the object of this paper to recommend. It claims not the novelty of originality, as we shall afterwards more fully show, but its bold and heroic aspect, and the success with which its employment is said to have been attended, give it an intrinsic importance, that needs not to be enhanced by the celebrity of the name under whose auspices it has been revived.

"The most powerful means of arresting the complaint, is by making incisions through the inflamed skin and the subjacent adipose and cellular textures, which are the seat of disease. These incisions are followed very quickly, and sometimes almost instantaneously, by relief and cessation of the pain and tension; and this alleviation of the local suffering is accompanied by a corresponding interruption of the inflammation, whether it be in the stage of effusion, or in the more advanced period of suppuration and sloughing. The redness of the skin is visibly diminished during the flow of blood from the incisions; in twenty-four hours it has usually disappeared, and the skin itself is found wrinkled from the diminution of the general inflammatory tension. The immediate relief, although very desirable to the patient, is however of less consequence than the decided influence of the practice in preventing the further progress of the disorder; and this important result has never failed to occur, within my experience, when the case has been a proper one for the practice, and the state of the patient has admitted of its being fairly tried. The cases already referred to furnish the clearest evidence on these points."

These cases our limits allow us not to detail, but the importance and novelty of the subject will sanction us in grouping into a condensed form their most prominent features, that our readers may be entitled to decide for themselves upon the merits of the practice which they are intended to illustrate.

Of the 38 cases, which are appended to Mr. L.'s observations, 19 were treated by venesection, leeches, aperients, and such incidental medicines as symptoms required; of these none proved fatal. The 36th is the case in which the bandage was applied; the 37th and 38th are examples of inflammation of the cellular membrane, for which general and local bleeding and aperients were prescribed, the first of which terminated fatally;—and the remaining 16 are adduced as illustrations of the incisive treatment. The first 12 of these 16, which he alludes to in the above extract, recovered; the other four, two of which were communicated by Mr. Bullin, perished.

The *first two* of the 12 successful cases are examples of erysipelas of the face in young and healthy subjects, with high inflammatory fever, which was partly overcome by venesection before incisions were had recourse to. The eyelids were the parts incised, and the incisions, which were made transversely, "through the entire depth of the inflamed and swollen cellular structure," gave exit to some fluid and sloughs, after which the parts granulated kindly, and were soon healed; p. 132—135. In the *four* following cases the disease had attacked the arm. The first arose from venesection, the second from an injury inflicted on the elbow, the third succeeded an attack of fever, and the fourth supervened on amputation of a finger. Venesection was employed in three of them before the operation, and the fourth, which is communicated by Dr. Tweedje, from the journals of the London Fever Hospital, had been considerably reduced by an attack

of fever to which the affection of the arm succeeded. In one of these cases the incisions were from 10 to 12 inches long; and on that of Cassan Mr. L. observes,—

"This patient was in great danger when the incisions were made; indeed, most of those who saw him considered his situation hopeless. I feared that he might sink under the loss of blood consequent on the incisions, and therefore made only one cut in the first instance (on the 21st of May,) which produced but little relief. Very decided benefit resulted from the two incisions made on the following day, and the more free discharge of blood which they occasioned. This case likewise shows that the affection cannot be stopped by venesection, and that leeches, even when very freely employed, are comparatively inefficacious." 149.

In the *seventh* case nothing particular occurs; the leg and thigh were the parts affected. In the *eighth*, an incision was made through the skin and cellular tissue, nearly the whole length of the right leg, which was followed by about 40 ounces of blood and some pus. A bad night was passed, and on the day following the pulse was very slow and feeble; but, by the judicious use of ammonia, wine, bark, and acids, the strength returned, the wound gradually healed, and the patient was finally dismissed in perfect health. The *ninth* case is very remarkable, and strongly illustrates the virtue of incisions in circumstances the most desperate. The whole foot, leg, and thigh, were *enormously* swollen, and the inflammation extended to the very groin. The lower half of the thigh and the entire leg were covered with vesications;—the pulse was weak and frequent, and the patient was six or seven months advanced in pregnancy; an incision was made *from the ham to the heel*; 24 ounces of blood was collected, some pus was discharged, and the entire limb was covered with a bread-poultice. The next day presented a very different train of symptoms. The inflammation was much and generally reduced, the tension and pain lessened, and a comfortable night had been passed. The sulph. quin. was ordered from weakness having been complained of, and she left the hospital in less than three weeks after the operation, with a sound limb and renovated health. Mr. L. very justly remarks, that—

"This is the most formidable case of phlegmonous erysipelas that I have seen, in reference both to the intensity and extent of the inflammation. When I contemplated the immense swelling of the entire limb up to the groin, with the vivid redness and vesications of the skin, the acute pain, and the firm feel of the swelling, and considered further the advanced state of pregnancy, I apprehended that the termination would be fatal whatever treatment was adopted. The speedy and effectual relief afforded by the incision, and the rapid recovery from a condition of so much danger, illustrate very strikingly the advantages of this treatment. Under any other course of proceedings I feel convinced, either that the patient would have died from the immediate extension of the local and general disturbance, or have been exposed to nearly equal danger from extensive suppuration and sloughing." 159.

Phlegmonous erysipelas of the leg and thigh forms the subject of the *tenth* case; but, excepting the activity with which the disease advanced, there is nothing in its detail very particular. Although 30 ounces were lost by the operation, the lancet was twice required afterwards, and the blood abstracted was exceedingly inflamed. The patient was two months confined before he could use his limb, and even then he was obliged to go with crutches. The *eleventh* case merits particular notice, being one of those formidable phlegmonoid affections which frequently result from dissection. The patient was Dr. Dill, who communicates the case, and a perusal of the symptoms under which he laboured will strike the reader with their similarity to those detailed in Dr. Duncan's valuable paper on Diffused Cellular Inflammation. Two particular features in the history are—that

no unpleasant consequences appeared until the evening of the second day after the inspection of the body, and that, so soon as local action commenced, the constitution became immediately implicated, and the disease hastened forward with astonishing rapidity. The incision appears evidently to have arrested the inflammation, and the suddenness with which the symptoms vanished after the operation, was only equalled by the rapidity of their progress before it. Dr. Duncan thinks that the deep puncture which was made in Mr. Blythe's side, was the eventual means of saving his life; and had incisions been early employed in the cases of Mr. Young and Dr. Dewar, we have no reason to suspect that similar success would not have crowned the treatment; for, with Dr. Dill, we are convinced "it may be used, both with safety and effect, in a class of accidents, whose fatal character has hitherto ranked them in the list of our most frightful diseases." p. 169. As the last of the twelve successful cases is very similar to the former in its nature and treatment, we will pass on to give a more detailed account of the four which ended fatally.

The subject of the first was Charles Neale, aged 47, who was seized with phlegmonous erysipelas of the fore-arm, in consequence of a wound inflicted on it by himself while making an attempt upon his life. He first cut his arm, and then made a large deep wound between the thyroid cartilage and hyoid bone, which laid bare the carotid artery, without dividing any important vessel. Forty-eight leeches having been applied without relief, two incisions were made through the skin and cellular membrane of the fore-arm, extending nearly *the length of the limb*.

"Blood flowed from these at first rather freely, but not more so than is desirable for procuring relief to the inflamed and distended parts: the bleeding gradually stopped, and had ceased in about three quarters of an hour, when the patient fainted; before any means could be adopted for his restoration, the state of syncope had terminated in death. As the arm had been laid in a broad wooden platter, the blood was collected, and afterwards measured; it amounted to a little more than twenty ounces." 175.

Post-mortem examination gave no account of the fatal event. The body appeared stout and robust—the incisions had not penetrated the fascia—a large transverse opening was found in the larynx, between the glottis and epiglottis, but without injury of either—some water lay beneath the arachnoid and in the ventricles—much of the serous membrane of the lungs was cartilaginous and beneath it was a thin stratum of compact matter, as black as soot. The condition of the abdominal viscera is not noticed.

"I think (says Mr. L.) we must ascribe the principal cause of death, in this instance, to the mental depression and constitutional derangement which preceded and accompanied the erysipelas. In a man so robust, it is difficult to believe that the loss of 20 ounces could of itself produce death; the despondency which urged him to suicide, and the depression which forbade all hope of recovery, were strong predisposing causes; the wound in the larynx increased the general irritation, and the hæmorrhage, so instantaneously produced, made an impression upon the system for which it was badly prepared, and accelerated an event that would, in all probability, have occurred without the aid of the scalpel."

In the second fatal instance, a man, of an unhealthy appearance, was attacked with erysipelas oedematodes of the foot and leg, from a severe blow upon the ankle. Sixty leeches, fomentation and poultices were applied, and 14 ounces were taken from the arm, which had the effect of procuring some temporary relief at much constitutional expense, for his pulse be-

came feeble, his countenance sallow, and his tongue thickly coated. He was now ordered 10 grains of subcarb. ammon. every six hours, by which his general symptoms were for a time improved, and the redness and swelling of the leg diminished.

"The tongue, however, did not become clean, and an inactivity and even drowsiness, which had been observable from the time of admission, were not lessened. On the 19th there was considerable inflammation on the outside of the foot, which was much swollen, tense, and acutely painful. The tongue began to show a slight brown tint, and was rather dry; he was thirsty, and inclined to doze. Mr. Lloyd and other gentlemen recommended a free incision under the supposition that matter had formed; and, as I considered the measure advisable, although I could not distinguish fluctuation, I made a cut about two inches long through the skin and cellular texture, which was loaded with serous effusion. The wound bled so little at the moment, that sponging with tepid water was directed to encourage the bleeding, which soon became more free. The nurse to whom this duty was entrusted in consequence of the sister of the ward being ill in bed, allowed the blood to flow for nearly two hours, before she apprised the house-surgeon, who found the patient with a very feeble pulse and cold extremities. By raising the limb, and placing a bit of lint between the edges of the wound, the hæmorrhage was immediately stopped. The pulse rose, and the heat of the body was restored by the administration of wine, brandy, and ammonia. The local inflammation was completely relieved, and the erysipelas disappeared entirely from the leg. Wine and stimulants were continued, and the pulse regained its strength. The tongue however was rather dry, and covered with a yellow crust in the middle, the discharges from the bowels were unhealthy, and the listlessness with disposition to sleep remained the same. This kind of sensorial oppression increased, the tongue became brown and quite dry, and he died on the 28th." 180.

The *third* case is that of a gentleman, whose glands above the inner condyle of the right arm became inflamed, swollen, and rather painful, the morning after having examined the body of a person who had died of phthisis. When Mr. Bullin, who gives the history of the case, saw him, he had much head-ach, sense of oppression at the præcordia, hot skin, yellow tongue, flushed face, and rather dilated pupils. His pulse was 90, soft, and his bowels regular. Twelve ounces were taken from the nape by cupping, 12 leeches were applied to the arm, and a brisk purge given. A slight remission was the result of this treatment, but in the evening, head-ach having returned, 24 leeches were put upon the temples, and the hair removed, cold wash applied, and three grains of extr. hyoscyam. ordered at bed-time. On the 24th, (the next day) the head was relieved, but the arm was worse. Six leeches to arm, afterwards ten ounces by the lancet, other medicines continued. 25th. Symptoms more favourable, but still heat and pain of head. Pulse 120, soft; 20 leeches to temples, and, at night, venesection to 20 ounces, which caused syncope. 26th. Arm enlarged, and erysipelas extended to shoulders: pulse 120, soft; 12 leeches applied. 27th. Symptoms unchanged, except increase of head-ach, blood from the nape, and 12 leeches to the temples. On the 28th, Mr. L. saw him, and made two incisions in the inflamed parts—one in the arm, the other in the fore-arm, from which two or three pounds of blood were lost, when syncope came on. The operation was followed by dimness of sight and feeling of alarm; but his head became cold and free from pain—the arm was less red and swollen, and the pulse fell to 96. *March 1st.* No sleep, although two grains of opium had been taken, and the mind had wandered during night. Some hiccough, and respiration laboured, but the arm continues better. Wine, ammonia and opium are now given during day, and an enema of opium and assaætida at night. On the morning of the second he died. Mr. L. commenting on the above interesting history, observes:—

"It is clear from the narrative of Mr. Bullin, that the progress of the local mischief was arrested by the incisions, and that they produced, what all the previous measures had failed to effect, a very marked diminution of the inflammation. Whether the fatal event happened in consequence or in spite of them, is a question on which opinions will differ, and light would probably have been thrown by examination of the body.

"It does not appear to me that Mr. B. died from loss of blood. It has been suggested that he perished from the shock of the operation. If we understand by that phrase a violent impression on the nervous system, ending fatally within a short time, the explanation is hardly admissible in this instance. I remained in the room after making the incisions, about ten minutes, during which nothing occurred to attract particular attention. At the end of twenty-four hours, when I again saw Mr. B. he was sleeping tranquilly, with a steady and quiet pulse, by no means deficient in strength; and the state of the arm was greatly improved. He died thirty-six hours after the incisions had been made.

"When we consider how often death has ensued from wounds received in dissection under various plans of treatment, we need not be surprized at a fresh instance of fatal termination. When we reflect further that both the local and general symptoms were severe in this case, and that, at the time of making the incisions, the inflammation not only occupied the whole upper extremity, but had even extended to the body, we may reasonably doubt whether the event of the case was in any way owing to that treatment." 188.

A young lady is the subject of the last case. An abscess had formed over the first joint of the great toe, which discharged some pus when opened with a lancet, which gave very immediate relief. Shortly after, however, a rigor and head-ach came on, lancinating pains from the toe to the groin were complained of, and syncope supervened. Fomentations, poultices, and a brisk cathartic, were ordered, but, on the next day, all the symptoms were much aggravated, and the patient lay in a high state of fever. A patch of inflammation was now visible about half an inch from the injured joint, and the groin, and even axilla were painful; eight leeches to temples, six to foot, other medicines continued. 2d. Toe quite relieved, and head somewhat easier; 12 leeches to temples. Repet. alia. On the 4th two other spots appeared, for which 10 leeches were applied, the other remedies repeated, and opium ordered at night. 5th, Foot better, but increased constitutional disturbance. Mr. L. saw her on the 9th, when she was found labouring under phlegmonous erysipelas of the foot and leg, and slight symptomatic fever. The countenance was rather wild, the features sharp, and the pulse vibrated strongly. "Two incisions, of three or four inches each, were made, one in the foot, the other in the lower part of the leg, and a small quantity of blood flowed from them." A slight improvement followed, but the fever soon returned, and the pulse never lost that vibratory character which the author considers very unfavourable. She died on the 23d, after every variety of general and local treatment had been employed, although the inflammation never passed the knee, and the redness and swelling had disappeared for three or four days before death.

"The latter event was caused by a continuance of the feverish disturbance, which was attended throughout by the vibratory pulse already described. Venesection was twice practised in small quantity, with partial relief; the blood being strongly buffed and cupped. The pulse ranged from 120 to 130—it was occasionally higher and lower; once or twice it was so low as 108, but never less. The head was shaved, and covered with cold wash; it was not affected in the earlier period of the complaint; but delirium came on, first at night, and afterwards through the day also. Salines with antimony, purgatives, calomel and digitalis, were all fully tried, with only temporary benefit. That nothing might be omitted, we employed hyosiamms and opium in the

latter stage, and gave a trial to tonics and cordials, sulphate of quinine and porter being the articles selected for this purpose. They were used most cautiously, but were decidedly injurious. In this case neither the erysipelas nor the incisions were the cause of death, which must be ascribed to the fever, originally excited by local irritation, kept up and aggravated by the free use of opium, in the beginning of the affection." 193

The above short *digest* of Mr. L.'s treatment, with its results, will, we hope, enable the reader to form his own estimate of its importance. Many of the cases in which incisions were practised, were unusually severe, and, when compared with the first 19 that were managed in the ordinary manner, presented very little prospect of recovery. It is true that none of the first proved fatal, and that many of them were more quickly dismissed; but the mortality which occurred in the latter number was a small proportion of the cases treated, and when we include in our calculation the inveteracy of the symptoms, and the diseased habits of many of the subjects upon whom the operation was performed, we must ascribe to the efficacy of the treatment not a few of the recoveries, while we can easily discover, in some of the cases which perished, sufficient cause of death in circumstances independent of the operation. The fatal termination of the *first* and *last* cases, cannot, we think, be attributed to the treatment; our comments upon the first we have already given, and with Mr. Lawrence's explanation of the last we entirely concur. The *second* and *third* are those alone which may give rise to difference, but as to the *third*, Dr. Duncan's paper is sufficient to prove the fatality of such accidents under any plan of management. The only question which occurs to us is, whether incisive treatment be judicious in cases so desperate and far advanced.

The grand object of incisions should be the *prevention* rather than the *removal* of the effects of inflammation; or, in other words, they should give exit to blood, rather than to pus and sloughs. We cannot agree with those who advocate the employment of extensive incisions in the closing stages of inflammatory action. When pus is formed, it is unquestionably proper to remove it, but let it be removed at the smallest expense to the constitution. To make furrows in the integument, of 10 and 14 inches, under such symptoms, we hold to be unnecessary in its object, and dangerous in its tendency. The period of depletion has then generally passed; the time for support has generally arrived. The good to be expected from such lengthened incisions cannot be procured, because the parts and the symptoms are not in that state in which they are required. It is when the action is beginning, has commenced, or is at its acmé; when the heat is burning, the thirst ardent, the tension great, the pulse strong, the pain acute, and the texture full of blood—that the constitution, so artificially excited, can support, and the integuments, so plethoric, can require such incisions. Then the scalpel will disemburthen the gorged integuments of their oppressive load, will restore the distended vessels to their wonted size, will subdue the activity and reduce the temperature of the stimulated textures, and will prevent the approach, or curtail the progress, of that matured action, which only finds its cure in the secretions which it forms. But if we wait until the disease has crept among the tendons and the fasciæ; until the cellular tissue have died; until pus travels, by every outlet, from the original seat of action over the entire limb, and by extending the excitement, propagates the mischief to an indefinite degree;—we wait until our 14 inches should be reduced to four, and until our object is as much to remove the proceeds of past action, as to restrict the progress of what we have to dread. We have witnessed, and we have practised, and we

are friendly to Mr. L's treatment, but we would urgently advise its adoption at an early period, in fact, so soon as the disease is recognized. From all that we have seen and read, we can discover no argument for delaying, but we know of many for immediately employing the scalpel.

The truth of these observations is well illustrated in several of the foregoing cases, particularly the 5th, 7th, 9th, 11th, and 12th. Excepting in the 9th, no pus had formed before the operation, the cellular membrane was merely inflamed, firm, and full of blood, and the recovery was uninterrupted and rapid. Whereas, in the four fatal cases, the operation was long delayed, and the cellular membrane was found dead and sloughy in almost all those patients whose convalescence was protracted. We, therefore, wish Mr. L. had insisted at greater length upon a point which must be admitted to be of much importance, for, although in one or two scattered sentences, the reader is led to understand that the incisive treatment is most effectual in the first stage, the fact of its being so is not held forward in that prominent manner to which a leading principle is entitled.

After observing that he does not advise incisions in erysipelas generally, but that he confines their employment to phlegmonous cases, he very justly adds—

"We cannot however determine our treatment merely by reference to the name of the affection. Diseases appear quite distinct in nosologies, but we find them shaded off and so blended in nature, that it is frequently very difficult to mark out their boundaries. The presence or absence of inflammation of the cellular texture will not afford the criterion we are in search of on this occasion; indeed the difference between simple and phlegmonous erysipelas is rather in the degree than in the seat of the affection. Simple erysipelas seldom takes place without some inflammation of the cellular membrane. We may trust to the antiphlogistic treatment already described in doubtful cases, in the milder instances of phlegmonous erysipelas, and in the very early period of the more severe ones. It is important, however, to decide the point quickly, and to make the incisions without delay where we judge them necessary, as they stop the progress of the disorder, and prevent the occurrence of suppuration and sloughing." 70.

It is in phlegmonous erysipelas of the limbs that they are most effectual; in that of the face, Mr. L. does not recommend them, believing that it has a tolerably regular course, ending either in resolution, vesication, or desquamation, and that it may be treated as simple erysipelas. In that of the head, when it is exterior to the aponeurosis, they are not necessary; but when it invades the cellular tissue under it, early incisions will prevent the formation of matter, and much pain to the patient.

But their employment need not be restricted to purely phlegmonous erysipelas, for we have seen, in the cases of Dr. Dill and Mr. B. that they have been extended to a most important class of accidents, and, although in the latter with a fatal result, had the scalpel been taken up as early as it was had recourse to in the former, we doubt not the patient would have had a better chance of recovery.

Much has been said about the length to which the incision should be carried, and much unjust and unnecessary ridicule has been thrown upon the practice, from the belief that Mr. L. indiscriminately recommends long incisions. The groundlessness of such a rumour the following passage will sufficiently expose—

"As the numerous short cuts, or the single longer incision will equally answer the end, the selection may be left in each case to the patient or the surgeon. The incision should divide the skin and the cellular texture down to the fascia; it is not necessary to penetrate the latter. A double-edged bistoury is the most convenient instrument for the purpose." 78.

Some, as Mr. Guthrie, recommend them to be long; others, as Mr. Hutchison, advise them to be short; and a third class of practitioners, as Dr.

Dobson, while they approve of, and act upon, the same principle, are satisfied with mere punctures. But, we believe, no general rule will universally apply. The disease may be so extended, the constitution so robust, and the system so plethoric, that incisions of ten, or even more inches, may be necessary; whereas, cases may occur in which punctures would be the best, because the safest mode of giving relief to the distended, but weakened texture.

As the cuts are sometimes followed by profuse hæmorrhage in weakened and old people, we must be cautious, and not allow it to proceed too far. To arrest it, it will, in general, be found sufficient to elevate the incised limb, and apply pressure; but if these means fail, a ligature will be necessary. If the bleeding, on the other hand, have stopped too soon, cloths wrung out of warm water will encourage it, and when a proper quantity of blood has been obtained, the incisions should be covered with a warm bread poultice. They soon begin to suppurate, and if nothing occur to impede the cure, they granulate quickly, and soon fill up. When the scalpel is used in a late stage, the suppuration is much more copious, the cellular membrane sloughs away, and the skin is detached to a considerable distance around the sore. In these cases the waste is often great, and the strength requires support.

We have now closed a full, and, we trust, an impartial review of a long and valuable paper; and, while in some points neither our pathology nor experience corresponds with the sentiments it inculcates, we have differed with reluctance when opposition was called for, and we have been careful to acquaint the reader with the reasons upon which our opinions have been formed. Perfect unanimity in medicine will never be enjoyed, and, perhaps, it is not to be desired. Difference of judgment elicits truths that would be otherwise unknown; and although disagreement implies error, concord is not necessarily the proof of truth.

Mr. Lawrence does not, as we before observed, claim the merit of originality in recommending this plan of treating phlegmonous erysipelas. O'Halloran was probably the first who taught it, but he confined it to a species of gangrene subsequent to phlebotomy. It was afterwards mentioned by Pott and Vogel; Dr. Johnson, in 1814,* recommended it strongly in erysipelas of the extremities; Mr. Hutchison, in the same year, published a paper upon the subject, and it has been variously noticed by many subsequent writers. But Mr. Lawrence has certainly investigated more largely than his predecessors the claim which it has upon the profession; and, while the public will be able to appreciate the talents with which this investigation has been prosecuted, they must feel indebted to the author for the perfection to which his conclusions have been brought.

Immediately succeeding Mr. Lawrence's paper, which occupies 205 octavo pages, we have two short communications from Dr. Dobson, of Greenwich Hospital, and Mr. Copland Hutchison. Some particulars of the former paper were given by us at the time it was read, and will be found at page 514 of our 16th number for April, 1828. The following extract will convey the substance of Dr. Dobson's paper in his own words.

“With regard to the nature of erysipelas in which I use the punctures, I answer in all cases, whether simple, traumatic, or phlegmonous; the number of punctures

* Report from the Scheldt fleet, *New Medical and Physical Journal*, May, 1814. Dr. J. claims not the merit of discovery, but merely the priority of publication on the subject.—*Ed.*

I make at any one time varies according to the extent of the disease, but is rarely under ten, and seldom exceeding fifty; the depth and extent of each puncture vary also according to circumstances, being made deeper when the parts are more tumid, but more superficial when the tumefaction is not so great; from two to four-tenths of an inch may however be considered the proper answer to that part of your inquiry. I repeat the punctures to the number and extent required, mostly twice a day, and often in bad cases, three or four times in the twenty-four hours, and in the whole course of this practice, which has been resorted to by me in several hundred cases, having adopted it more than a dozen years ago, I have never seen any bad consequences resulting from its employment. The quantity of fluid (for it is not blood alone, but blood and effused serum) which these punctures discharge, although sometimes considerable, need never create any alarm, for however freely it may flow at first, it gradually diminishes, and soon spontaneously ceases. I use these punctures in every part of the scalp, or face, body, or extremities, and never more freely than about the eyelids, and I have often found a patient with both eyes closed, which by freely puncturing he has been able to open in a few minutes; and what will be found not less true, than it may appear surprising, these punctures mostly heal in a few hours, and never entail any material marks upon the patient!

"Where puncturing has been practised from the first appearance of the disease, suppuration rarely takes place, and I have observed that it always diminishes the extent of that result even in those cases which have existed for some days before it has been resorted to: but when matter does at any time form under the skin, I let it out without delay wherever I feel it, but I think the integuments in those cases are more preserved by making several small openings, than by one large incision, and the matter is quite as well evacuated. And I am perfectly sure that before suppuration, puncturing, which can be repeated again and again as occasion may require, has every advantage over large openings, which, like punctures, cease to bleed before the disease is subdued, but which cannot like them be renewed, and are often followed by extensive ulceration.

"The adjuvants which I use with the punctures in this disease are in the first place a brisk cathartic of extract of colocynth, scammony, and calomel; I then prescribe the following mixture, which, while it keeps up the free evacuation of the bowels, acts rather cordially upon the stomach:

R. Mistur. Camphor, fʒiii Liq. Ammon. Acet. Tincturæ Rhœi ʒā fʒiss. M.

Sumat cochlearia duo larga 3tiā vel 4tā quāque horā.

I also employ a lotion composed as follows, viz.

Liq. Ammon. Acet. Oss. Sp. Camphor. fʒj. Aquæ puræ fʒvij. M.

which however unchemical it may seem from the camphor and spirit being divorced, experience has proved to be both a beneficial and a comfortable application, and may be always used with the punctures without any fear of revulsion or metastasis, which have sometimes resulted from the use of cold lotions without local abstraction; and it is no uncommon practice for me to prescribe wine or even gin for my patients in this disease at this establishment, at the very time I am puncturing them twice or thrice a day!" 209.

Mr. Hutchison's communication consists of a case and a few remarks on the practice of incisions generally.

The subject of this case was a man, aged 52 years, of spare and relaxed habit, who had received a slight abrasion on the ridge of the right tibia, from the iron step of a gig. This was neglected; and when Mr. H. saw the case, there was only "a slight degree of erysipelatous inflammation of the erratic species, and of a red brick-dust colour," and extending from the tuberosity to within four or five inches of the ankle. Towards the centre of the gastrocnemius there was a very painful spot. The treatment had been sulphate of quinine and wine, with leeches to the inflamed part, and fomentations. This treatment was approved of, and continued; but, next day, Mr. H. was startled "at the appearance of a mortified patch of integument, the size of a dollar, on the outside of the leg, the patient's pulse

at this time continuing of the same strength and frequency." Mr. H. now made six or seven incisions down to the muscles, each an inch in length—two into the sphacelated part. In six hours the sphacelus was arrested—the pain greatly diminished—and matter exuding from the incised parts. There was a subsequent demonstration of sphacelus, which was stopped by a single incision. The patient did well.

In Mr. Hutchison's "remarks," he queries whether, among the crowded inhabitants of London, where erysipelas is occasionally so insidious in its attacks, and dangerous in its issue, "it might not, in the great majority of instances, eventually prove to be the best and safest practice to have recourse to incision at once." We have a notion that, in private practice, this cannot be done, whether it be the safer mode of treatment or not. Mr. H. suspects that Dr. Dobson's plan will not prove effectual in ERYSIPELAS PHLEGMONOIDES, where the seat of the inflammation is deeper than the cutaneous tissues—and we are inclined to agree with him. From Dr. Dobson Mr. H. turns to his friend Mr. Lawrence; but as we are not very eager to come between two combatants armed with keen scalpels, we shall let Mr. H. speak for himself.

"I do loudly protest against the practice of making incisions of such length as recommended by Mr. Lawrence, both as unnecessary, and not so likely to stop the progress of the disease, where it is spread over a wide surface, as several smaller incisions made on different parts, where the disease is found to be most active; for it will have been seen, by the closely observing surgeon, that when this disease runs on to suppuration or to gangrene, for example, abscesses or gangrenous patches are occasionally found to have taken place in different parts laterally distant, and having no communication with each other. Now if one long incision be made in a direct line through the middle of the inflamed surface, according to Mr. Lawrence, the disease may be still unsubdued, though greatly lessened on each side of it, to a certain distance. But supposing the disease be found to occupy a space from the great trochanter to the toes, including the whole circle of the thigh, leg, and foot, which I have witnessed in two or three cases, wherein eighteen incisions were certainly made of an inch and a half in length, will one or even two incisions of fourteen inches in length arrest such an extent of disease? My experience teaches me that they will not, and hence it is, that I have stated, that in such desperate cases we must have recourse to such a number of small incisions, according to the extent of inflamed surface, as will arrest the disease. It appears to me more than probable that the fatal case of erysipelas treated after this manner, and detailed by Mr. Lawrence with so much candour, might not have terminated so, had the incision been confined to an inch or an inch and a half; for it was in this case, if I mistake not, that he made his longest incision; but even here the patient ought not to have been lost, for surely the dresser or house-surgeon of the hospital, might have secured the bleeding vessels with a ligature: and therefore this case ought not to militate against the practice." 220.

All the world knows how wittily Mr. Lawrence repelled this sortie of his learned friend, proving that the incisions "by instalment," did actually exceed *in length* the wholesale cuts which were represented as so dangerous in the hands of Mr. Lawrence. We have no doubt that each of the three modifications (for they are only modifications of the same practice) will be occasionally applicable, and not only applicable but preferable, one to the others, in particular cases. The judicious practitioner will not have much difficulty in making the selection. In this article we have concentrated a mass of information on a very important point of surgery, which, we hope, will prove useful to our readers, on both sides of the Atlantic.

XI.

Cases of Disease of the Heart, accompanied with Pathological Observations.

By ROBERT ADAMS, A.B. one of the Surgeons to Jervis Street Infirmary.
Octavo, pp. 102.

[Dublin Hospital Reports.]

In this very extended paper, Mr. Adams has reported many remarkable examples of disease of the heart and its coverings, which have occurred in his own practice; and to these cases he has appended such observations as naturally arose in his mind, during a melancholy attendance on the sufferers. The facts and observations are very well arranged under three heads—Morbid Affections of the Membranous Coverings of the Heart—Changes in its Muscular Structure—Organic Alterations of the Auricular and Arterial Openings.

I.—MEMBRANOUS COVERINGS.

The pericardium consists of two layers, widely different in structure and use. The internal, or serous layer, is a transparent membrane, forming a shut sac, investing the heart, and reflected thence over the internal surface of the external or fibrous portion. This last is partially covered by the pleura—attached to the diaphragm below—and lost above by surrounding the arteries. The fibrous portion of pericardium is, therefore, interposed between two very delicately organized membranes—and may probably serve as a barrier to *retard* the extension of inflammation from one serous membrane to the other—and thus prevent a combination of pleuritis and pericarditis. This combination, however, does not very uncommonly take place—nor is it easy to say in which membrane the phlogosis commenced. The pleura, from its position, is probably the first seat of inflammation in these cases.

A. *Fibrous Membrane.* This membrane is liable to ossification, which, however, is a rare disease. The only minute and full account of such a case is given by Laennec. The patient died dropsical, with the usual symptoms of diseased heart.

“On dissection the heart was found enlarged, and at first sight seemed as it were enclosed in a bony case; around the base of the ventricles there was a band about two inches broad, partly cartilaginous, partly bony, unequally thick, flattened, and a little rough on its surface, which sent from its interior a process, separating the ventricles from the auricles, and along each side of the septum of the ventricles, it produced a triangular prolongation, almost entirely cartilaginous, about two inches broad above, which terminated in an angle at a short distance from the apex of the heart; this plate of bone was evidently developed between the fibrous and serous layer of the pericardium” 356.

Mr. Adams met with one instance of this rare affection in Sir P. Dun's Hospital. The man had been suffocated by charcoal, and, on dissection, the heart was found adherent to the pericardium, and was surrounded by a zone of bone, three lines in thickness, and more than an inch in breadth.

B. Serous Membrane. The *anatomical characters* of pericarditis are well described by recent pathologists; but the symptoms, during life, are very equivocal and obscure.

"I have been frequently called upon to examine the bodies of persons supposed to have died of disease of the lungs or liver, and I have found pericarditis the true and single source of death, although during the previous illness the heart was never suspected to be the seat of a fatal affection. I have myself been witness to the treatment of a case of chronic inflammation of the pericardium in a girl aged 14, which terminated fatally, and during the whole progress of the disease phthisis, or rather what was considered hepatic phthisis, was the disease under which this child was supposed to be gradually declining. Her general appearance bore the character of scrophula; a few days previous to her death I took the following notes of her state which I copy verbatim. 'Sarah Langley is greatly emaciated and very weak, yet does not wish to remain in bed, but prefers to be dressed, and to sit most of the day crouched by the side of the fire; the countenance is pale, and bespeaks great distress in the chest, yet the lips are not livid, but of a good color; the eyes appear large and brilliant; the skin is harsh, dry and rough, and cannot be by any means made clean; there is a general disposition to a growth of downy hair every where on the surface; the skin is never relaxed by perspiration; the bowels are regular, but occasionally affected by diarrhœa. The tongue is reddish, and but little different from the healthy state; the respiration is 54, the pulse 156 in the minute. There is much wheezing in her respiration during the night, and frequent cough, with but little expectoration. Upon exposing the chest and abdomen with a view to make a more particular examination, the former presented an unusually good formation; it was equally and uniformly convex, and the outlines of what we supposed a much enlarged liver could be traced through the parietes of the abdomen. The child lived about a week after these notes were taken.'" 361.

Dissection. The lungs were sound; the pericardium contained 20 ounces of purulent fluid. An organized membrane invested the heart's surface, and lined the reflected layer. It was granulated. The liver was sound, but depressed, in an unusual manner, into the abdomen, probably from the distention of the pericardium. The above was a case of chronic pericarditis, and the symptoms very puzzling. Let us look at a case of the acute kind.

A young lady had enjoyed good health till within a week of her illness, when she plunged her feet into cold water during the catamenial period. A slight pulmonic attack (as was supposed) succeeded, from which she apparently recovered. But her spirits drooped from this time, and she was averse to exercise. The next period passed without the menstrual secretion, and now she became oppressed in her breathing, with short cough, hot skin, pale countenance, small quick and irregular pulse, total loss of appetite—and, in short, many of the symptoms of ordinary fever, which compelled her to take to her bed. She lay on her left side or back, teased with dry cough, and occasional paroxysms of dyspnœa, and some tendency

to syncope. She seldom got more than two hours sleep at night. The treatment consisted of venesection, leeches, blisters, and purgatives. Anodynes were given to procure sleep. She died at the expiration of 14 days—the brain and lungs were the supposed seats of the disease.

Dissection. "Upon raising up the sternum a large mass of yellow tenacious lymph covered the pericardium, and filled the cellular membrane which connects this bag to the back part of the sternum. Upon cutting into the pericardium a quantity of sero-purulent fluid flowed out, the whole of the heart's surface was covered with a thick tenacious layer of organized lymph, rough, and reticulated on its surface. The concavity of the pericardium presented the same appearance, and several minute red specks denoted the organized state of the new membrane, which had been produced by very active inflammation, yet the exact seat of which had never once been suspected by two very eminent medical gentlemen who had seen this lady in her short illness. The lungs in this case were perfectly sound; the vessels of the bronchial membrane, particularly at the bifurcation of the trachea, were in a slight state of congestion." 363.

The next case related is one of rheumatic metastasis.

A female child, 6 years of age, had a severe attack of acute rheumatism in several joints as well as muscles. Active depletion was employed, as well as the warm bath, and the disease was subdued. In a few months afterwards she was again attacked, and the constitutional symptoms were very severe. The remedies were active, but the symptoms changed little till the fourth day—

"About which time the inflammation leaving its original seat passed along the muscles forming the parietes of the abdomen and thorax, and in the latter region very particularly fixed itself on the left side over the heart." 366.

The pulse now presented a remarkable tremulous vibratory feel, in addition to hardness and frequency. The horizontal posture could not be borne—the pain had left the limbs—there was great distress about the heart—breathing hurried—countenance anxious—great debility—some cough—viscid expectoration. She died on the 18th day of her illness.

Dissection. The body was remarkably pale, and had rather a bloated appearance. The abdomen, particularly examined, exhibited no trace of inflammation. The lungs were perfectly healthy; but the pericardium was much enlarged and evidently distended by a fluid. On opening this bag, a quantity of sero-purulent fluid, with flakes of lymph floating in it, poured out. The surface of the heart and corresponding part of the pericardium were coated with lymph, and presented the usual appearances of acute pericarditis." 367.

Mr. A. draws the attention of his brethren to the distinction between simple rheumatism of the heart, and rheumatic inflammation of that organ. The following is our author's description of the former affection.

"In the one case the organ is simply, and often but transiently affected, just as any other muscle is, the person has perhaps been affected with rheumatic pains in the loins, with but little fever; These suddenly leaving this region run to the diaphragm, and cause a temporary affection of the breathing, with what the patient calls spasms in the chest. The countenance undergoes sudden changes; there are at such moments strong beats of the heart, and intermissions of the pulse sensible to the patient; and in females I have sometimes seen such attacks end in an hysteric paroxysm, and all symptoms

subside when the lumbar pains returned. In such cases, the tongue is somewhat foul, the skin is frequently relaxed by profuse perspiration, and the urine is remarkably turbid; but the pulse has neither the frequency, hardness, nor peculiar vibratory feel that it has in the other, and more dangerous case: the countenance does not betray that anxiety, or, as it is denominated by some authors, that anguish which it almost uniformly expresses when the membranes of the heart are affected with acute inflammation, from whatsoever cause proceeding." 369;

Although this may occasionally pass on to carditis, there cannot, our author thinks, be a doubt that the two cases are very different, and require different treatment. Carditis rheumatica Mr. A. has usually seen in children, and in persons about or under the age of puberty, in whom metastasis is more liable to occur than in advanced life. "The translation of rheumatic inflammation to the heart has usually occurred where the synovial system of the extremities was the original seat of the disease."

Our author is doubtful whether there has ever been any fatal case of metastasis, of true arthritic inflammation, to the serous membrane of the heart, though this disease undoubtedly affects the heart very often, exciting agonising pain in the breast. He has known two cases of erysipelas of the head and face terminate fatally by metastasis to the heart.

"In both, as soon as the external redness receded, the breathing became distressed, the countenance agitated, and rest in the horizontal position impossible. Yet the general symptoms of pericarditis were so obscure, as to excite no suspicion in the mind of the attendants as to the real nature of the case. Both were weak and debilitated patients, in which this affection supervened towards the close of a long illness: neither lived more than two days after the sudden disappearance from the surface of the erysipelatous redness. The countenance, the breathing, the state of the pulse, and apparent debility in both, seemed to forbid any active interference on the part of the medical attendants, who had no suspicion of the real nature of the case, (so obscure were the symptoms of pericarditis,) until the examination of the body disclosed it. The pericardium contained some turbid fluid, but had contracted no adhesions to the heart. A quantity of lymph, evidently recently effused, lined the concavity of the pericardium, and thickly and unequally covered the surface of the heart itself: appearances which left no doubt as to the immediate cause of the death of these individuals." 372.

II. CHANGES IN THE MUSCULAR STRUCTURE.

The parietes of the heart may become increased in thickness, and its cavities enlarged, with or without any ostensible cause. The usual ostensible cause is a narrowing of the aperture through which the blood passes out from an auricle or a ventricle. Sometimes, however, the organ attains a great size without this cause. The following is a remarkable instance.

A medical gentleman, æt. 60, of very anxious mind, had enjoyed good health, *with the exception of three rheumatic fevers*, from the last of which his chest suffered severely, and was left very susceptible of coughs and colds. He had palpitation—difficulty of breathing—bad digestion, though the appetite was good—flatulence—disturbed uneasy sleep—inability to lie on the

right side—pulse 70, but very strong and full. The chest was well formed, but the action of the heart was inordinately strong, and extended over the whole left side of the chest. The difficulty of breathing was not constant—it came on in violent paroxysms, which were relieved by leaning forward. All these symptoms increasing, his legs began to swell—the abdomen filled with water—the pulse intermitted—he became comatose, and died.

Dissection. The left lung was compressed and condensed in an extraordinary degree—no water in the chest—the heart was double its natural size in every respect—its cavities enlarged in proportion to the thickening of the parietes—but no other disease of any kind. The dissection was made by Mr. Wilmott. The patient derived great benefit from occasional venesection.

Another case, the symptoms of which are almost exactly similar, but much more detailed, is given by our author. In this case there had been no preceding rheumatism, but the patient had one severe and profuse epistaxis—and afterwards a violent pneumonia, requiring the loss of 60 ounces of blood in one day. The phenomena of enlargement of the heart were equally as prominent as in the preceding case; but still his physicians had hopes that many of his symptoms were nervous. After various vicissitudes, the patient was seized with fever, which reduced him to the door of death; yet, strange to say, he not only weathered this storm, but nearly lost his cough, dyspnoea, and other symptoms of pulmonary and cardiac disease. The mitigation of his disease was only temporary, and mainly attributable to the depletion and abstinence employed during the fever. Still, from time to time, he was greatly relieved by venesection, diuretics, and low diet.

“In this way was this gentleman’s life prolonged, every symptom was palliated as it presented itself, the cough and dyspnoea were always more or less relieved by venesection: the swelling of the limbs would remain obstinate for a time, and general dropsy be apprehended, then the kidneys would act, and the quantity of urine which would be evacuated was surprising. We ascertained that for several nights in succession above four quarts of urine were evacuated: at this time the thirst was not urgent, and he drank but little; the œdema of the feet and legs, after these extraordinary evacuations, would totally disappear, and perhaps for weeks there would be no return of the swelling.” 383.

So long as the gentleman strictly adhered to vegetable regimen, the cough, dyspnoea, and palpitation were not troublesome; “but the slightest deviation from the general plan laid down did not fail to be followed by some threatening of his former symptoms.” In one of his relapses, venesection failed to give even a temporary relief—diuretics made no impression on the kidneys—the abdomen became distended—symptoms of hydrothorax came on—and an unexpected attack of peritonitis put a period to his life.

Dissection. The peritoneal surface of the abdominal organs presented the usual appearances of inflammation. The structure of the liver was

not diseased. There were hydatids in one of the kidneys. The right cavity of the thorax contained about seven pints of whey-coloured serum. Two thirds of this lung were converted into a solid substance that sunk in water. The other lung was sound. The heart and pericardium almost universally adhered.

"The heart itself was fully three times its natural size: the parietes of both ventricles were greatly thickened, but particularly the left; at one spot only, towards the root of the pulmonary artery, the right ventricle appeared thin and weak. The muscular structure of the interior of the organ was much developed. The *carneæ columnæ* of the right side were remarkably prominent, and those of the left also were greatly thickened and enlarged. The valvular apparatus of both sides was perfect: we could discover no bony or earthy deposition either in the heart or in any part of the arterial system. All present agreed that they had never seen a heart so much enlarged." 387.

Mr. Adams believes that active hypertrophy of the heart is occasionally the cause of apoplexy—and, of this, we think, there cannot be a rational doubt entertained. Mr. A. observes, that the attention of the physician has not been sufficiently directed to the fact "that apoplexy may be the result of a state of the heart, altogether different from that we have been just considering." This is a change of the muscular structure into fat. There can be no question that the brain may become oppressed in two very different ways—by arterial turgescence, and venous remora, congestion, or stasis. The following interesting case we shall present in the words of the author.

"An officer in the revenue aged 68 years, of a full habit of body, had for a long time been incapable of any exertion, as he was subject to oppression of his breathing, and continued cough. In May, 1819, in conjunction with his ordinary medical attendant, Mr. Duggan, I saw this gentleman: he was just then recovering from the effects of an apoplectic attack, which had suddenly seized him three days before. He was well enough to be about his house, and even to go out. But he was oppressed by stupor, having a constant disposition to sleep, and still a very troublesome cough. What most attracted my attention was, the irregularity of his breathing, and remarkable slowness of the pulse, which generally ranged at the rate of 30 in a minute. Mr. Duggan informed me that he had been in almost continual attendance on this gentleman for the last seven years; and that during that period he had seen him, he is quite certain, in no less than twenty apoplectic attacks. Before each of them he was observed, for a day or two, heavy and lethargic, with loss of memory. He would then fall down in a state of complete insensibility, and was on several occasions hurt by the fall. When they attacked him, his pulse would become even slower than usual; his breathing loudly stertorous. He was bled without loss of time, and the most active purgative medicines were exhibited. As a preventive measure, a large issue was inserted in the neck, and a spare regimen was directed for him. He recovered from these attacks without any paralysis. Œdema of the feet and ankles came on early in December; his cough became more urgent, and his breathing more oppressed; his faculties too became weaker.

"November 4th, 1819, he was suddenly seized with an apoplectic attack, which in two hours carried him off, before the arrival of his medical attendant." 397.

Dissection. There was a gelatinous fluid between the arachnoid membrane and pia mater. The substance of the brain was watery, and of a yellowish white colour. There was some water in the ventricles. "The coats of the carotid and middle artery of the dura mater were quite white and opaque from bony deposition, but were pervious."

"The right lung was sound. The left was compressed, and adhered to the side of the thorax: about a pint of serum and quantities of soft fat, of a very deep yellow colour, filled up the space between the anterior mediastinum and the compressed lung, which was impervious to air, and must have been totally useless.

"The right auricle of the heart was much dilated. The right ventricle externally presented no appearance whatever of muscular fibres: it seemed composed of fat through almost its whole substance, of the same deep yellow colour as that which occupied the place of the left lung. The reticulated lining of the ventricle, which here and there allowed the fat to appear between its fibres, alone presented any appearance of muscular structure.

"The left ventricle was very thin, and its whole surface was covered with a layer of fat. Beneath this, the muscular structure was not a line in thickness; it had degenerated from its natural state; was soft, and easily torn, and a section of it exhibited more the appearance of liver than of a heart. The septum of the ventricles presented the same appearance. In both ventricles, even in the lining fibres, yellow spots, where fat had occupied the place of muscular structure, were to be observed. The whole organ was remarkably light; the valves were all sound, except those of the aorta, which were studded with specks of bone, but elsewhere were cartilaginous and elastic, from which they derived a disposition to remain closed; a fluid gently injected from the ventricle would pass them; still, when the heart was reversed and water poured from the ventricle upon them, their valves retained it; its weight was not sufficient to separate the edges of the thickened valves. There was much fluid blood contained in the heart." 399.

The liver was natural—the spleen enlarged—the other viscera sound.

Passing over some cases of rupture of the ventricles, we come to a curious case communicated to Mr. Adams by Dr. Cheyne.

Case. A musician, aged 34 years, robust, sanguine, and intemperate, was seized with a most acute pain exactly in the region of the heart. At one time it was so violent as to render him nearly frantic, and five or six persons were required to hold him in bed. He had a dry cough—his breathing was oppressed. He recovered in a great degree from this; but after exposure to cold, and imprudent exercise, he relapsed and presented himself to Dr. Cheyne with œdematous legs and thighs.

"The stroke of the heart was indistinct, tremulous, and appeared to extend over the whole of the left side of the chest, from above the clavicle to below the scrobiculus cordis; at no one part between these points was the stroke more distinct than at another. His pulse was 148, unequal, irregular, and indistinct; his complexion was of a leaden colour, his countenance bloated, his eye staring and wild. His recollection was becoming indistinct; unable to lie down, he passed the night in his chair. His appetite was not much impaired, but he was flatulent and costive; his tongue was furred, its edges were livid. His urine was scanty, high coloured and lateritious." 406.

He died three days afterwards without a struggle. There were several quarts of fluid in the right thoracic cavity—also a considerable quantity in the pericardium—lungs sound—the heart was as large as that of a bullock.

"The parietes of the left ventricle were thickened, its internal surface much inflamed, various irregular excrescences grew from the mitral valves and semilunar valves of the aorta, and the cordæ tendinæ, which connect the larger portion of the mitral valve to the walls of the left ventricle, were torn off just at the point of their insertion

into the edge of the valve ; at this point there were also some of the above-mentioned excrescences ; four of the broken cordæ tendineæ hung loose into the ventricle." 406.

One case is given by Mr. Adams of false aneurism of the heart, namely, a pouch going off from one of the ventricles. Most of the cases on record, of this rare disease, have already been presented to our readers in this Journal. The following will complete the list, up to the present time.

A female, aged 39 years, of sanguineous temperament, but with a constitution ruined by intemperance and profligacy, was admitted into one of the Dublin hospitals ; but, being deaf and dumb, no accurate history of the complaint could be obtained. Her pulse was full and quick—tongue white—breathing difficult—lips livid—pointed to the region of the heart as the seat of her sufferings. She was bled, blistered, purged, and starved ; by which means she was so much relieved that she left the hospital in ten days. Not long afterwards she returned, with all her former symptoms now greatly aggravated. The action of the heart was seen through her dress, and she could not bear the least pressure on that region—countenance bloated and livid—great difficulty of breathing—feet and limbs anasarcaous—pulse feeble and intermitting. She died three or four days after admission.

Dissection. On raising the sternum. Mr. Harrison (demonstrator of anatomy) was struck with the unusual size of the pericardium, its opacity and great firmness, particularly towards the apex of the heart, where it was distended by a tumour of considerable magnitude. The left lung adhered to the pericardium, and the phrenic nerve was imbedded in a quantity of adhesive matter, (the result of inflammation) connecting the lung to the pericardium—and thus thrown a good deal out of its natural course. The pericardium was unusually adherent to the heart. There was a large round tumour, of very firm consistence, situated behind and below the apex of the heart. It was nearly as large as the heart itself, and much more firm to the touch.

"It was inseparably attached to the left ventricle, and to the pericardium ; in some parts it was as firm as bone, and small patches of calcareous matter could be felt in different situations. Inferiorly the tumour rested on, and was closely attached to, the central tendon of the diaphragm ; anteriorly it was intimately connected with the pleura, the cartilages of the 5th, 6th, and 7th ribs, and the intervening muscles ; this latter connexion required to be cautiously dissected through, as the sac was here very thin, though as hard as bone. Upon making a small incision into the tumour posteriorly, I found that the sac was very thin, and similar to that of an old arterial aneurism ; it was lined with a stratum of chalky or calcareous substance, which in some spots was so firm as to resist the knife ; the sac in this situation was about the thickness of a wafer, and appeared to be formed solely of the condensed and altered pericardium ; elsewhere the sac was found much thicker, and appeared to have been formed not only by the pericardium, but also by the fleshy substance, and lining membrane of the heart ; in some places the fleshy fibres, after a short course, became so condensed and pale as to lose all appearance of muscle ; in all other situations the pericardium and lining membrane of the heart were closely connected, except where, in a few small patches, some earthy depositions intervened ; at the lowest part of the tumour the sac appeared to be formed solely of the thickened pericardium." 411.

From this examination, Mr. Harrison inferred that the aneurismal sac had been formed, in the first instance, by dilatation of the three structures ; but that, as the tumour increased, the two inner structures became absorbed, so that the pericardial covering only remained. The sac was filled with a firm coagulated mass, of greyish-colour and laminated texture, as in a common aneurism. There was nothing unusual in the right or left auricle, or in the auriculo-ventricular valves. The right ventricle was sound. The lining membrane of the left ventricle was unusually dense and white—the muscular structure natural—at the apex was the aperture leading to the aneurismal sac, filled with a clot of blood. On making a section of the tumour, it was found that a considerable portion of its parietes was formed by a dilatation of the muscular substance of the heart. The coagulated mass occupying the tumour was formed of successive layers of coagulated blood. There were no morbid appearances in the abdomen.

III. ORGANIC CHANGES IN THE ARTERIAL AND AURICULAR OPENINGS OF THE VENTRICLES.

These apertures are liable to contractions invariably combined with cartilaginous or osseous depositions. Such alterations much disturb the circulation, and through that the function of almost every organ in the body. The right side of the heart is infinitely less frequently affected in this way than the left. Our author has never seen the right auriculo-ventricular opening contracted ; whereas the left aperture is, he thinks, much more often affected than is generally imagined. This disease occurs at all periods of life—in the young as well as in the old—as often in females as in males. The signs of this complaint, in its early stage, are so anomalous, that they are usually denominated nervous, and the treatment is too often calculated to aggravate rather than relieve the organic complaint. We have seldom an opportunity of investigating the early changes which take place in these apertures, as the patient rarely dies until worn out by a long train of suffering, and until the aperture of communication between the left chambers of the heart is converted into a mere fissure. Mr. A. had two opportunities of seeing this disease in its early stage, in consequence of sudden death, one by epilepsy, the other by apoplexy. We shall introduce some particulars of these cases.

Case. 1. A lady died suddenly of apoplexy, as was said, at the age of 45. In the brain there was no effusion of blood or serum in the ventricles, nor any unnatural appearance, except a slight effusion between the membranes.

“The heart appeared remarkably short and was rounded towards its apex ; in the interior of the organ every thing was natural except the mitral valve, which as yet

was not beset with earthy concretions, but was shortened to more than half its natural depth. It was yellow, opaque, and at the same time thickened as if a cartilaginous substance had been deposited between its laminae; the aperture which the edges of this valve circumscribed was sufficiently open to allow the blood a free passage from the auricle into the ventricle; but it was manifestly incompetent to perform the full office of a valve, or prevent a regurgitation of blood into the auricle during the contractions of the ventricle." 417.

This lady had complained for nearly a year of numerous ill-defined sensations about the præcordial region, which were termed nervous, and were attended with oppressed breathing, palpitation, and small pulse. Thus, while she appeared in good health, her pulse was 120 in the minute, and extremely weak. This state of things appears to have excited no alarm in the minds of her medical attendants, though it produced an anticipation in the mind of the patient, which was unfortunately realized.

Case 2. Anne Conroy, aged 45, had enjoyed tolerable health till within a year of the date of application, at which time she complained of weight in her right side—palpitation—uneasiness about the heart—occasional cough with frothy expectoration—great variation in the tone of her voice—paroxysms of dyspnœa—a certain degree of livor of countenance. In other respects her health seemed good.

"The symptoms which most distressed her were palpitation of the heart and vertigo, with which last was generally associated the awful idea that she was about to fall down dead. Upon laying my hand over the præcordial region, I discovered that the action of the heart, as to force and frequency, was indeed extraordinary, whilst the pulse, felt at the wrist, was a mere thready stream, unequal and irregular, beating at the rate of 150 in a minute. There was not as yet the slightest disposition to œdema. There was no deformity of the thorax observable." 419.

This want of correspondence between the action of the heart and the pulse induced suspicion of organic disease, and blood was ordered from the arm—the diet directed to be vegetable—while digitalis and squills, in small doses, were prescribed. None of these directions were complied with, and in less than a month our author was called to the patient, who was in a fit of epilepsy. The universal convulsion did not relax for a moment till death closed the scene, a few hours afterwards.

In the brain there was great venous congestion, and slight opacity of the arachnoid—some serous effusion in the right side of the chest—right side of the heart of greater opacity than the left—pulmonary artery dilated—aorta contracted—left ventricle diminished in size—mitral valve not half its ordinary depth, its borders shrivelled and puckered up as if a thread were drawn round them, and containing some spiculæ of bone. "It was manifestly incompetent to do more than half guard the aperture of communication between the auricle and ventricle." This aperture itself was contracted. This state of valve allowed a reflux of blood into the auricle at each ventricular contraction. We shall conclude this division of the subject with the following descriptive sketch.

"When the disease is fully established, the signs of the contraction of the left auriculo-ventricular opening are by no means doubtful. The person affected with it has the general symptoms of diseased heart; there are paroxysms of dyspnœa and hæmoptysis; much uneasiness also is experienced in lying in any but one position; sometimes the patient can only lie with ease on the right side; he more commonly prefers the left, but the cause of these varieties I am unable to explain. The palpitations of the heart are irregular, widely extended; they are seen underneath the lower extremity of the sternum, and the heart beats with considerable force against the side of the chest. As the disease advances, all the above-mentioned symptoms are aggravated; the limbs become anasaruous, and the abdomen fills with water. Towards the latter period of the disease I have seen jaundice set in, and in so many cases that I cannot look upon it as an accidental circumstance, but rather as a symptom occasionally to be found attending the very last stage of this disease. Strong pulsations are seen in the jugular veins, and there appears a general thrill through the branches of the arterial system as in aneurisms; when the ear is attentively applied to the side of the thorax, a very complex kind of movement, hard to describe, is heard—a hissing purring noise as it has been denominated, caused by the transmission of blood through a narrow orifice, is in most cases very evident. The more decided symptoms of this affection are to be found in the peculiar irregularity and want of correspondence in the pulse, as felt at the wrist, and examined simultaneously at the heart; the latter often beats so violently against the sides of the thorax as to shake the patient in his bed, while at the same time the arterial pulse is small, weak, and irregular; indeed such is the state of the pulse in the arteries, that the physician attending to this only, and overlooking the state of the heart, might readily suppose his patient in the last extremity, and dread to have recourse to those remedies from which alone any relief is to be expected.

"This irregularity, want of correspondence, and disproportion between the force of the beat of the heart and the pulse as felt at the wrist, are not the only circumstances worthy of our attention; for such a set of symptoms are common to the contraction of the auriculo-ventricular opening, and the narrowing of the aortic aperture; but the pathognomonic sign of the former disease will be found in this, that the heart will sometimes give two, three, or even four beats in succession, which are not perceptible to the hand examining the pulse in the arteries: the pulse at the wrist is very peculiar, and a knowledge of its character will assist us much in forming our diagnosis. I know not how to describe it otherwise than by saying, that it appears to the person examining it as if there were two pulses, one slow and deliberate for two or three beats, which is succeeded by three or four rapid and indistinct pulsations; the heart upon the whole generally pulsates ten or fifteen times more in a minute than the artery, and its stroke is often more distinct in one arm than another." 424.

The progress of this disease is generally very slow—and its severity can be greatly mitigated by medical and dietetical treatment—provided the patient will submit to confinement, quietude, and strict vegetable regimen. "Even after the dropsical symptoms have shewn themselves, the patient may live for a number of years." It is surprising, as our author remarks, to what a small fissure the left auriculo-ventricular aperture may be reduced before death supervenes. The dropsy occurring in this disease, is, our author thinks, more easily managed than that which occurs towards the close of any organic affection of the liver or lungs. We shall abridge one or two cases in illustration.

Case. Jane Gibson had great difficulty of breathing, constant palpitation, head-ach, vertigo, anasaruous limbs, abdomen ascitic, scanty urine, little or no cough; but the dyspnœa, &c. greatly aggravated by the least exertion.

She could only lie on the right side. She had been about a year in this condition, having previously enjoyed good health. On examination, the chest was found well-formed—the action of the heart rapid, strong, and irregular—the pulse weak and thready—“*there were often two, three, or even four pulsations of the heart, at a moment when all pulsation was suspended in the arteries, and could not be felt by the finger.*” The pulse generally ranged to the number of 120 at the wrist—but more at the heart. The pulsation of the jugular veins was tremendous, and corresponded exactly with the action of the heart.

“Having seen such an exact combination of symptoms as this in many cases which terminated fatally, and ascertained by an examination after death that their source was to be found in the narrowing of the aperture of communication between the left auricle and ventricle, I have little doubt as to the real nature of this case.” 427.

The woman is still living but there can be but little doubt as to the pathological condition of the heart. The want of correspondence between the ventricular action and the pulse at the wrist is an almost infallible sign of valvular disease, or disease of the apertures of communication between the chambers of the heart.

Case. A young lad, aged 15, had been delicate from infancy, and liable to dyspnœa, cough, palpitation, &c. from very slight causes. He had not been confined to the house, however, till within the last year. His urine became scanty—his limbs anasarcaous—and he had, every evening, a paroxysm of dyspnœa.

“When I saw him, which was about six weeks before his death, I found him in the following state: his countenance shewed the distress and difficulty of breathing under which he laboured; his eyelids were swollen with a watery effusion; his inferior limbs were anasarcaous: there was an unusual prominence of the left side of the sternum to be observed: the pulsations of the heart extended themselves widely over the thorax, and at a distance could be heard beating with considerable force against his breast. That this organ performed some kind of complex double movement, and that its motions were accompanied with a purring sound, as in varicose aneurisms, was plainly audible, and could be also recognized when the hand was placed over the region of the heart; the pulse at the wrist was very weak and irregular, sometimes very obscure, and always manifestly disproportioned to the powerful action of the heart. There was often a double pulse at the heart for the single beat in the arteries; pulsations were also seen in the veins of the neck. Upon a careful consideration of all the symptoms, I concluded that the contraction of the left auriculo-ventricular aperture, if not congenital in this case, had been for a long time completely established; the prognosis given was unfavourable; all that remained to be done was to palliate symptoms as they occurred.” 429.

The dropsical swellings were often evacuated by diuretics, but all means at length failed to give relief, and death closed the scene.

Dissection. The lungs were sound—a pint of water in each pleural cavity—very little in the pericardium. The heart had an unnatural rounded appearance. The left ventricle was not near so long as the right, which terminated in a rounded pouch-like extremity, not at all resem-

bling the natural apex of the heart. The two arteries were in proportion to the ventricles from which they arose, the pulmonary trunk being dilated to nearly twice its natural size; while the aorta was diminished to about one half its ordinary calibre. The cause of all this will now be seen.

"The left auricle was largely dilated, and contained a quantity of grumous blood; the left ventricle was of its natural thickness, but shortened and diminished a little in capacity. The communication between these was greatly interrupted, not by any contraction resulting from bony depositions, or by narrowing from any cause commencing in the zona annularis of the ventricle; but it appeared as if the contiguous edges of the left auriculo ventricular valves had, as it were, coalesced (or had never been separated); and thus was formed a transverse septum, constituting at once a floor to the auricle, and roof to the ventricle.—concave towards the former, convex towards the latter; perforated by an oblong opening, bearing in its appearance some resemblance to the rima of the larynx. There was not to be discovered in the valves a speck of bony or earthy deposition. A few yellow cartilaginous excrescences, preparatory to such a state, alone occupied the broadest extremity of the narrow opening." 432.

IV.—DISEASE OF THE SEMILUNAR VALVES.

There is no more common organic lesion about the heart than ossification—at least, induration of the aortic valves. This change obstructs the free issue of blood from the ventricle, and prevents, of course, the valves from shutting when the ventricle is dilating. When this induration takes place gradually as old age creeps on, it is wonderful what little disturbance in the system at large is produced. But, on the other hand, when it occurs in young people (which is not very common) or about the middle period of life, the symptoms are well marked.

"There are strong palpitations of the heart, and dyspnœa complained of, which are much increased by the slightest exertion; in a word, the ordinary signs of active enlargement of the left ventricle are present, except that the force of the arterial pulse is not proportioned to the action of the heart. It is irregular, and its contractions are accompanied with a hissing or purring sound, which can be clearly heard when the ear is applied to the side of the thorax, and a peculiar thrill is felt as in varicose aneurism, when the hand is laid on the præcordial region. With such a combination of symptoms this disease may be readily confounded with that which consists in a contraction of the left auriculo-ventricular opening, which we have just been considering: it is said, however, that the diagnosis will be found in this circumstance, that in the latter disease there is generally a double pulse to be felt at the heart for the single pulsation in the artery." 442.

When the heart is examined in those who die of this disease, viz. contraction of the arterial opening of the left ventricle, the parietes of this side are generally found hypertrophied, and the cavity increased in magnitude. We shall give some particulars of one more case before we close this article.

Case. A gentleman, aged 68, of pallid countenance, yet full and corpulent, while exerting himself in arranging some books, felt a sudden pain in

his chest, extending down his right arm, accompanied by a sensation of numbness. His sight became dim—he had vertigo—but did not fall. From that time his breathing became oppressed—and the pulse in his right arm was imperceptible. It was extremely weak in the left radial. On the following day, 18th October, the most careful examination could not detect pulsation in any artery of the body. The movement of the heart was not perceptible by the hand on the chest. An obscure undulating motion was audible when the ear was applied to the cardiac region. His breathing was high and laborious, and could only be performed when the body was erect. At night he became worse—he was restless—and the attempt to lie down increased the dyspnœa. He was aware of his danger, being himself a physician, but he was tranquil, and even cheerful. His appetite was indifferent, and his digestion impaired. In this state he remained six weeks, with little alteration, except decline of strength and increase of dyspnœa. “During the entire of this distressing period, *no pulse was to be felt in any artery of the body*,” although Mr. Adams made a daily and careful examination. At the end of the seventh week, after a restless and wretched night, he was observed to be a little delirious. He then fell into a state of stupor—“his upper lip became suddenly swollen, and a large livid spot appeared on it.” At 12 o’clock that day he ceased to exist.

“*Dissection.* There was slight œdema of the lower limbs. The abdomen was much distended with air and contained a small quantity of serum.

“There were adhesions of the right lung to the side of the thorax; on separating these, a cavity was discovered containing about a pint of a yellow sero-purulent fluid. This cavity was lined by a membrane of organized lymph, evidently of recent formation. The substance of this lung exhibited in no part any traces of inflammation. The left lung was not adherent; it was perfectly healthy; yet a small quantity of serum was contained in the left cavity.

“The heart was large, flabby, and of a yellow colour from fatty deposition: all its cavities were distended with fluid blood; the semilunar valves of the aorta were completely ossified; but this bony or earthy deposition was not confined to the aorta; it extended to the coronary arteries, which were so completely converted into bone as to be quite solid, having no perceptible cavity except at the distance of an inch from their origin; beyond this these vessels were at intervals completely interrupted by small bony specks.” 447.

It will be acknowledged that the appearances above-mentioned do not satisfactorily account for the remarkable phenomenon of cessation of arterial pulsation for seven weeks. We have recorded a case which was under our own care, and where there was no pulsation in any tangible artery for 48 hours; but we never heard of one where the non-pulsation continued so long as in this case.* The hypothesis suggested by our author is as feasible as any one which we can imagine on this occasion, it is—“that the heart,

* Dr. Cheyne informs Mr. A. that he knows of two individuals, still living, in whom, for two days, there was a failure of the pulse. In one, which occurred during an attack of misplaced gout, the cessation was complete:—In the other, after an attack of cholera, a faint pulsation could be felt about four or five times in the minute.

directly deprived of its due supply of blood, by the obliteration of proper nutrient vessels, might have been suddenly thrown into a state of partial paralysis—hence the feebleness of its efforts, which were inadequate to excite the slightest movement in the arteries.”

We have now endeavoured to exhibit a full and complete delineation of this paper, occupying more than one hundred pages of the volume before us. It does credit to the zeal and careful observation of the author, and must prove useful to his brethren at large. We return him our thanks for the information which he has afforded us.

XII.

Cases of Tumours in the Abdomen, arising from Organic Disease of the Stomach; with Remarks. By ED. J. SEYMOUR, M. D. &c.

[Med-Chir. Trans. Vol. XIV.]

NOTWITHSTANDING the pliancy of the abdominal parietes, and the facilities which we possess of manual examinations there, in addition to general and local symptoms, yet it is certain that medical men are far more puzzled by abdominal than thoracic diseases. We have often drawn the attention of our brethren to this subject, and have now another opportunity, in the analysis of Dr. Seymour's paper recently published.

Several cases have lately fallen under Dr. S.'s notice, in which tumours of considerable size were found to spring from the stomach, and in two of these the organ was changed in structure, without exhibiting corresponding symptoms during life. Such instances are by no means uncommon, though very inexplicable. The case of Napoleon was an example which attracted the attention of the whole world at the time. Dr. Monro states the case of a lady, who had suffered, during some time, from pain in the epigastric region, indigestion, and flatulence. On examination before death, a tumour was found in the right side of the navel, of an oval shape, and the size of an orange. It was supposed to be situated in the colon; but, on dissection, the stomach was found to have descended as low as the umbilicus, and, on opening it, there appeared a tumour adhering by its neck to the villous coat. It was of smooth surface—cold—tough—and difficult to cut through. Dr. Baillie tells us, that

“Where the person is much emaciated, and the cancerous swelling is situated near the pylorus, or along a part of the great curvature of the stomach, it may be felt in the living body by a careful examination by the hand.” 224.

This, as Dr. Seymour observes, merely implies that, in certain cases, such enlargements may be discovered; whereas, in Dr. S.'s cases, the tumours were visible and very large.

“The essential symptoms of cancer or fungus hæmatodes of the pylorus enumerated by authors, are pain in the region of the stomach aggravated on taking food, frequent vomiting sometimes mixed with blood, often occurring about half an hour after solids or fluids have been swallowed, sensation of weakness, occasional syncope. As the

disease advances, the vomiting increases in frequency, and resembles coffee in colour, and there are often accessions of hectic fever, with great emaciation.

"The disease very rarely, if ever, attacks persons under forty years of age, and is more common in women than in men. It has been very frequently observed in persons subjected either to great fatigue of mind or anxiety. In a great majority of cases there is a remarkably exsanguine appearance in the countenance, even early in the disease.

"In the numerous cases related by M. Lieutaud, vomiting was always present, and in the greater number acute pain was experienced in the stomach. M. Vicq. d'Azyr, in his very able article *Anatomie Pathologique*, in speaking of this disease, says, 'It is worthy of remark, that there is *always vomiting* when the seat of the malady occupies the pylorus, or its neighbourhood, so deglutition is impeded or altogether obstructed when the disease attacks the cardiac orifice.'

"When the disease," says Dr. Monro, 'is seated in the stomach, there is great pain in the organ affected, with all the usual symptoms of indigestion, very frequent nausea and vomiting, and the occasional rejection of blood by vomiting, and the patient dies completely exhausted.'" 225.

But although the above symptoms are generally present, they are not always so. Dr. Pemberton has related a case where very extensive disease existed in the stomach, and yet no symptom appeared during life to indicate such disorganization. Andral has recently related some cases of fungus hæmatodes of the pylorus, in the greater number of which there was no pain, but where the emaciation and vomiting, together with the occasional detection of hardness on pressure, "rendered it difficult *not* to perceive the nature of the disease."* M. Andral is, nevertheless of opinion, that no symptoms exist, which can, in the living body, point out the diagnosis between this disease, and chronic inflammation of the stomach. We shall now proceed to the cases brought forward by Dr. Seymour.

Case 1. Ann Row, æt. 39, unmarried, was received into St. George's hospital on the 11th July, 1827. She had complained of pain in the abdomen for several years past, and about the preceding Christmas was affected with hæmatemesis and diarrhœa, attended with violent pain. Two months prior to her entrance into hospital, she perceived a tumour at the inferior part of the left hypochondrium, stretching to the umbilicus.

"The tumour, which is hard, unequal, and very tender on pressure, occupies the whole of the epigastric and the umbilical region, extending to within an inch of the symphysis pubis and to the right iliac region; at this latter part (an inch to the right of the navel) it is more elevated, and there is a strong pulsation communicated through it. She vomits occasionally after taking food, but not always; sometimes when the stomach is empty. She describes what she vomits to be bitter and sour. Bowels very much relaxed, tongue clean and moist, and of natural colour; no catamenia for three months; pulse 90, very weak; urine scanty; she is much emaciated." 227.

Leeches, saline draughts, fomentations, oxide of bismuth, &c. were employed, but on the 18th of the same month, we find a diffused swelling

* This is the expression of Dr. Seymour, and we leave it to the sense of practitioners, whether it is the most appropriate which could have been used. It may be a difficult thing for Dr. S. to be deceived in the detection of an *internal* "fungus hæmatodes," but then he should have some mercy on his brethren, who have very great difficulty sometimes in detecting the nature of such an affection.

about the right clavicle, extending to the axilla, and very tender to the touch. A purging came on—emaciation advanced—and she died on the 25th of July.

Dissection. “The cardiac extremity of the stomach was healthy; but on cutting the anterior surface of the pyloric portion, the coats were found considerably thickened, and on the inner surface an irregular tumour presented itself, occupying about two thirds of the circumference of the stomach, and only leaving the anterior part free. The tumour began about the situation of the pylorus, and its greatest length was about five inches extending towards the left side. It projected about an inch into the interior of the stomach, the surface being very uneven, several round masses rising upwards from the body of the tumour. The surface was for the most part of a reddish yellow colour, some parts nearly brown, and here and there complete sloughs had been formed. The surface of the duodenum and of the stomach was very vascular around the tumour.

“In the centre of the tumour an opening about an inch and a half in diameter, with sloughy circular margin, led backwards into a cavity containing about two ounces of fetid pus. The whole surface of the cavity being covered with a brown sloughy membrane like the margin of the opening, its parietes were formed by adhesions between the stomach, colon, and duodenum anteriorly, and by the spine behind. At the margin of the opening of the stomach nearest the duodenum, a sloughy tumour about the size of a small orange projected from the general mass into the abscess, and still more to the right side another larger tumour was perceptible, both from the front of the abdomen and at the bottom of the diseased mass of the intestines and stomach, having the duodenum, colon, and stomach adherent to the anterior surface. This was the only part of the whole disease which had not yet ulcerated, and it seemed to be composed of glands united together; it was soft and pulpy and of a light colour, like the usual appearance of fungus hæmatodes. The remainder where ulcerated was also soft, and resembled very much the usual surface of a tumour composed of fungus hæmatodes when it has ulcerated through the common integuments.” 230.

Case 2. Mr. C. aged 50, who had enjoyed good health, and was temperate, but who was exposed to anxiety of mind, consulted Dr. S. in November, 1825, for a pain felt in the region of the bladder, especially after voiding urine, which contained much uric acid. The warm bath, soda, opium, relieved this complaint. In November, 1826, he complained of water-brash, unattended with pain; but his appetite was good, as was his health generally. He was ordered to take twenty minims of the liquor potassæ in lime-water twice a day, which he did not take. On the 13th March, 1827, Dr. S. accidentally saw this gentleman, and remarked that his countenance and manner betrayed great indisposition. On being stripped and examined in bed, the following phenomena presented themselves.

“About midway between the umbilicus and superior anterior spinous process of the left ilium, a tumour was observed of the size of a large orange, extremely hard, extending over about half an inch to the right side of the umbilicus, and an inch below it. This tumour was adherent to the integuments, was rather moveable, and there was considerable tenderness on pressure. Notwithstanding the size of the tumour, its tenderness, and its prominent figure, the patient, until my examination, was totally ignorant of its existence. The apparently rapid growth of the tumour, its hardness and irregularity, combined with the bloodless appearance of the patient, and the great and sudden loss of strength experienced, induced me to believe that the disease was of a malignant nature. A dozen leeches were ordered to the part, and a consultation took place in the evening with Dr. Nevinson. Dr. Nevinson was likewise of opinion that the disease was of a malignant kind, but no decision could be formed as to which of the viscera it affected particularly.” 232.

Next day Mr. Brodie examined the patient, and agreed in opinion that the disease was fungus hæmatodes. In the course of a few days Sir Astley Cooper investigated the complaint.

"The latter gentleman (Sir A.) was of opinion that the great intestine on the left side adhered to the parietes of the abdomen, that the inner coat had ulcerated, and a tumour was formed whose contents consisted of gas, ill-conditioned matter, and fæces." 233.

On the 23d of March, some fluctuation being perceived, an opening was made with a lancet, and about two ounces of fetid pus were discharged. Some hæmorrhage ensued—the countenance sunk—diarrhœa took place, but was checked. On the 26th there was free discharge from the opening, and the patient seemed to improve; but this amelioration did not last long. The tumour enlarged—and, by the 17th April, it occupied the whole of the umbilical region, being six inches in length and four in breadth, without any pain on pressure. Various means (including iodine) were used to stop the growth of the tumour, but without success. The liquor potassæ, increased to the amount of 25 minims five times in the 24 hours, gave most relief. During three weeks' course of this medicine, a sensible amendment was perceived—the strength increased—the skin assumed a healthier aspect—and the size of the tumour was somewhat diminished. But he gradually fell back, and lingered till the 2d of October, 1827, when he died exhausted, but without pain. During all this protracted illness, digestion was perfectly performed. He lived on animal and farinaceous food—took brandy and water after dinner—and never suffered pain after ingestion—never threw up any of his food. His appetite continued natural till within two days of his death.

Dissection. "The body was opened twenty-seven hours after death by Mr. Brodie, assisted by Mr. Cæsar Hawkins. On the external surface of the body several spots of purpura were perceived, and a tumour was easily felt through the parietes of the abdomen, with an opening in its centre, a little above and to the left side of the umbilicus, discharging some dark purulent fluid. The cavity of the abdomen contained about three quarts of water; on the removal of which, the tumour was found to be formed by the stomach, adhering extensively to the parietes, to which the transverse part of the colon and the omentum were also joined. The stomach was opened on the posterior part, and the cardiac portion and duodenum were found to be quite healthy, the pyloric half alone being the seat of disease. It appeared to consist of a thickening of the coats of this part of the stomach, in some parts above an inch in thickness, with an irregular tumour growing from its whole circumference, of the nature of fungus hæmatodes. The whole interior surface was ulcerated, and several portions of the tumour projected into the cavity of the stomach. The tumour was soft, and highly vascular in the inner part, and gradually became firmer and whiter towards the peritoneal surface, whence several white bands ran in an irregular manner towards the interior of the tumour. The anterior part of the stomach was the thickest, particularly where it adhered to the muscles of the abdomen; and in it several abscesses were discovered, one of the largest of which was the cavity in which the opening on the surface of the abdomen terminated. The œsophagus near its junction with the stomach contained a small cyst of fluid, resembling an hydatid in appearance, and of the size of a filbert. The liver was rather darker than usual, but otherwise healthy, except that in the left lobe several tubercles were observed of the size of a pea, of a white colour, and of the consistence of soft cartilage. All the other viscera appeared sound." 240.

Case 3. John Rae, aged 40, was admitted into St. George's Hospital under Dr. Hewett, 12th September, 1827. He had received a fall on his

back fifteen months previously, which stunned him, but from which he did not appear to sustain any serious injury. Three weeks afterwards, he experienced difficulty in the digestion of his food—that is, in his own words, “his victuals appeared to stop for three or four hours at a spot”—which spot corresponded with the cardia. There was no vomiting. These symptoms, he said, had been removed by some medicine given him. For eight or ten days before coming into the hospital he had had no evacuation from his bowels. By castor oil and injections, some motions were procured of a dark muddy appearance.

“Towards the right as well as the left hypochondrium and umbilicus, there seems to be some induration of the stomach, and perhaps also of the liver. Pulse 100, regular, soft. Skin natural. Tongue muddy, no yellowness of conjunctiva; he has a peculiarly exsanguine appearance, but has never had any hæmorrhage. That the tumour is of a malignant character, is rendered probable by the expression of countenance, the rapid emaciation, and general progress of symptoms.” 241.

Another examination next day left no doubt of the existence of a scirrhus of the stomach, especially of the pyloric orifice. The tongue is clean—appetite good—no inconvenience after eating. Fourteen drops of the solution of the hydriodate of potash (3ss. to 3j. of distilled water) were ordered every six hours; and this dose was increased to 20 drops—24 drops, without inconvenience. On the 1st of October, a purging came on, and on the 15th of the same month he died exhausted. In different examinations, while in the hospital, it was observed that a great mass of the tumour varied its situation according to the position of the body.

“Dissection. The greater part of the stomach seemed healthy, but at the pylorus a tumour was found as large as a man’s fist, and nearly globular in shape, occupying the anterior and lower part of the pyloric extremity. A small part projected over and was attached to the duodenum, but most of the tumour formed part of the circumference of the stomach in the situation mentioned, leaving the posterior and upper part of the pylorus free from disease, and not even thickened. The tumour, near its circumference, was hard and white in texture, apparently attached only to the outer part of the coats of the stomach; but in the inner surface of the diseased mass the coat had ulcerated, and a sloughy mass was exposed having a cavity in the centre which communicated with the cavity of the stomach, with irregular projections of a dark brown or blackish colour. The arch of the colon adhered slightly to the tumour, but was unaffected by the disease. A portion of the œsophagus which was cut off with the stomach, and which was about one inch and a half in length, was very much thickened and hardened in its muscular texture, the mucous coat being still healthy, and the cardiac portion of the stomach was also free from disease where it joined the œsophagus.” 244.

The liver was much tuberculated, and the branches of the vena portæ were singularly obstructed by a tuberculous encephaloid matter.

There is no doubt but the tumours which are here described are the same as those delineated by Laennec, Andral, and others, under the term, “*tumeurs encephaloides*,” but whether they are to be considered as of the same nature with tubercles found in the liver, we are not quite prepared to admit. Dr. S. hazards some speculations on the nature of that disturbance in the animal economy, (circulation, absorption, secretion,) which immediately precedes the formation of these diseases.

“It appears to me to present none of the ordinary phenomena of inflammation, nor is its termination in any manner similar to the terminations of that morbid process as far as they are at present understood, as effusion, suppuration, deposition of lymph, or hepatisation. It arises often without the unfortunate patient being aware of its commencement, and proceeds without pain, redness, or swelling, or heat of the affected

part, these not being observed until its size, or encroachment upon neighbouring parts, produces secondary attacks or alterations in contiguous textures, which rouses the attention of the patient. The exsanguine appearance of the patient, even at a very early period, and the uncommon depression of vital power which he experiences, would lead to the belief of a constitutional cause, either an alteration in the constituents of the blood, from which these diseased products are separated by the ordinary secreting power of vessels, or from a morbid alteration in the secreting powers themselves, or from both of these causes." 248.

Dr. Seymour appends a couple of cases where pain and vomiting, when they are attendants on this disease, "were effectually relieved for a considerable time by the administration of the prussic acid." Some very good plates are added to this paper, illustrative of the morbid structures above described.

XIII.

On a New Method of preserving Anatomical Preparations. By JOHN DAVY, M. D. Physician to the Forces, &c.

[Ed. Med.-Chir. Trans. Vol. III.]

WE noticed some short time ago "a new mode of preserving dead subjects," by immersion in molasses—we have now to bring forward quite an opposite mode of preserving from corruption the "frail memorials"—not of man's existence, but of those maladies which have terminated that existence. Dr. Davy's zeal and research in the cause of medical science are very commendable, and we hope they will tend to benefit the profession and society at large. During the last two or three years, our author has been making trials of the method now to be described, and the success has exceeded his most sanguine expectations. Its advantages are triple—it is *cheap*—it is *durable*—and it clearly displays *minute structure*.

"Its great cheapness will be immediately obvious when I mention what it is, and that it is simply the sulphurous acid, which may be prepared in a manner equally economical and easy, by burning sulphur matches over water in any appropriate vessel,* agitating the water when the match ceases to burn, and, when the water is sufficiently impregnated with the acid gas, filtering the solution to render it clear and transparent," 231.

Of the durability of the process Dr. D. has no doubt. He has preparations by him which were made nearly three years ago, and nothing has been done to them all that time—no fluid has been added—no evaporation has taken place—and they are as perfect as when they were first immersed in the acid. They are merely confined in a bottle with a glass stopper, lubricated with a little cerate.

"From the experiments which I have made, the sulphurous acid appears to have nearly the same power in preventing the putrefaction of animal matter, as it has of stopping the fermentation of vegetable juices. I find that serum coagulated by this acid gas, and converted into a kind of jelly, may be kept in water several weeks,

* "The best kind of match for this purpose is that which is used in Italy,—cotton thread dipped in melted sulphur."

exposed to the air without undergoing any change; that the fibrine of the blood thus treated is equally exempt from change, and that the red particles of the blood, rendered by it of the colour and consistence of thick tar, exposed in water to the air, become, indeed, covered with a kind of mildew or byssus, and emit a peculiar disagreeable smell, but not a putrid smell. I mention the serum, the fibrine, and the colouring matter of the blood, because they decompose and become putrid very readily, (the two latter especially) sooner than most animal substances; and, therefore, what is applicable to them is *a fortiori* to anatomical preparations. I have made similar and direct trials of many preparations; I have exposed them to the air in this acid, and have taken them out of the acid and placed them in water exposed to the air, and the result has been satisfactory; shewing, that, after having been well acted on by the sulphurous acid, they are no longer liable to putrefaction. Some of these have undergone very little change during exposure to the air for several weeks in water; others have become soft and gelatinous, and have been partially reduced to a pulp, but without emitting any offensive odour, like that of putrid animal matter,—an odour rather like that of decaying vegetable matter affected with mildew.” 232.

The third advantage consists in the display of minute structure—and this, perhaps, is the chief recommendation of the acid. It does not, like alum or alkohol, contract what is immersed in it—nor does it, like solutions of nitre and other salts, lose its transparency and become turbid. On the contrary, “it expands and developes the parts, some more some less, so as to magnify them and make them more distinct, effecting in structure what the lens does in vision; and, at the same time, it remains clear, so that the lens may still be employed to heighten the effect, and convey still more minute information of the object.” This is almost miraculous, and we hope it is not exaggerated by the magnifying powers of the acid itself.

Dr. D. next enters into a detail of the effects of this preservative menstruum on the different textures. The following extract is interesting in many points of view.

“The skin immersed in the sulphurous acid swells considerably, and the cuticle is either thrown off or very easily detached. The cuticle of the sole of the foot, to mention a particular instance, is rendered almost transparent, and is but little thickened. When held between the eye and the light, its symmetrical structure is beautifully shewn, with innumerable dotted points, as it were, in the course of its linear waving, which probably serve the purpose of pores.* If the cuticle, detached by means of sulphurous acid, is dried, it shews its peculiar structure still more distinctly and elegantly.

“The cutis, distended by the sulphurous acid, appears as a tissue of extremely minute fibres and particles, condensed towards the outer surface, when in contact with the cuticle, and loose internally, where it gradually blends itself with the adipose texture.

“Seros membranes, immersed in the acid, swell considerably, and lose very little of their transparency. The inner surface of a portion of pericardium, now before me, has an uneven surface, and exhibits when examined with a common lens, a slight appearance of pores; its section shews as if it were composed of layers, and its outer surface displays a loose intermixture of fine fibres. A portion of pleura, with the exception of the cut part, (which is very much thinner, and not visibly in layers,) appears very similar, but less distinctly.

* “Probably similar to the very minute cavities in the skin of the common toad, which allow light to pass through them, but not the most delicate probe, being covered with a very fine transparent membrane.”

"On the cellular structure, the sulphurous acid has much the same effect as on the serous ;—it distends it greatly, and preserves it transparent."

"Cartilage is not changed by the acid ; neither the dense cartilages of the ribs, nor the delicate ones attached to certain organs, as the tarsus, epiglottis, &c. It is equally inactive on bone. Nor does it appear to have any sensible effect either on muscular fibre, or on the substance of the brain and spinal chord, or of the nerves and ganglia. On mucous membranes its action is considerable : it does not appear to dissolve them in the slightest degree, but it distends them ; renders them firm ; and shews their peculiar structure in a very striking manner. As an example, I shall give a brief sketch of the *primæ viæ*. First, I may premise, that it displays the cuticle or epithelium, terminating abruptly in the *œsophagus*, just above the entrance of the latter into the stomach, and in the rectum, just within the circle of the anus, or the upper boundary of the sphincter muscle. In both, the termination is distinct, and abrupt, and unquestionable, as it appears in a preparation now before me."

"When the epithelium is removed, (and it is most easily, either by placing it under a stream of water, or by the friction of the fingers,) and the mucous coat is brought distinctly into view, in the upper part of the *œsophagus* it appears very thin, provided with many and pretty large mucous follicles on each side, and several minute branches of nerves. With a magnifying glass of ordinary power, it seems to contain a most delicate tissue of white lines, running chiefly longitudinally, branching off slightly and anastomosing. The same appearance presents itself in the middle and lower part of the *œsophagus*, and more distinctly. But it is only in the upper part that any nerves can be seen distinctly ramifying in the semi-transparent mucous tissue. In the middle no follicles are visible, and only a few near its termination. Where it terminates, there is, in one preparation before me, quite a zone of what appears to be minute follicles : But this does not shew itself in another preparation."

"At the cardiac orifice of the stomach many minute follicles present themselves. Where the gullet ends, and the stomach commences, there is a sudden change of the appearance of the mucous texture ; the linear pencilling, (if I may be allowed the expression,) suddenly ends ; and, as it were, a dotted one commences, and with some variations, extends throughout this organ. When magnified it has the appearance of a very delicate lace-work, formed in the upper part, by the close juxtaposition of circular lines ; and, in the lower, by lines in the form nearly of the figure of 8 ; and, in the great arch of the stomach, by lines irregularly tortuous. But this, it must be confessed, is not to be seen in every preparation that I have examined ; and, therefore, I would rather limit myself by saying, that, in the stomach, the mucous texture has the appearance of a very delicate lace-work of lines or vessels."

"At the commencement of the duodenum, the appearance of the texture again distinctly changes. Here it appears as if covered with tortuous threads or vessels twice or thrice the size of those of the mucous coat of the stomach ; and, as the duodenum descends, the appearance strengthens. In some preparations there is an appearance of follicles, and of circular depressions but not in all I have examined ; and, when seen, they are most distinctly seen with the naked eye. A longitudinal section, including the pylorus, strikingly and invariably shews a layer of a minute glandular structure, embracing and belonging to the mucous coat of the duodenum, which terminates abruptly at the pylorus, but gradually in the contrary direction, and disappearing, or nearly so, about an inch and a half from the pylorus. The same section, too, shews how very thick the muscular and cellular coats of the stomach are, in comparison with those of the duodenum."

* "It appears very questionable, that the stomachs and intestines generally, the gall-bladder and the biliary ducts, the urinary, seminal, and the air passages, possess an epithelium analogous to cuticle and a continuation of it. All these parts must necessarily have a lining membrane, which seems to be their mucous coat, in each part somewhat different. It has been supposed that the mucous secreted by the membrane serves in lieu of cuticle, and it seems to be a probable conjecture."

"The inner coat of the jejunum, viewed with the naked eye, in sulphurous acid, appears to be distinctly villous, or as if studded with innumerable projecting capillary points; but this appearance vanishes when it is examined with a common lens; then, in some lights it appears to be covered with convoluted threads, having a kind of centre, round which they are described, which to the unaided eye, seems a minute mucous gland; and, in other lights, as minute projecting laminae variously bent.

"As the jejunum passes into the ilium, and as the ilium descends, another change takes place, and it is very strongly marked close to the termination of the latter intestine, where the mucous coat is truly villous;—so it appears to the naked eye in sulphurous acid; and, when examined in a favourable light with a lens, the villi exhibit the appearance of tubular projections rounded at the ends; and some of them have a form approaching to the conical, rather than the cylindrical. The sulphurous acid makes the glandular structure of the lower part of the ileum very distinct to the naked eye.

"This villous structure terminates suddenly at the valve of the colon (where the valve begins,) and a new kind of structure succeeds it in the valve, and proceeds with very little variation, of the same kind throughout the large intestines, even to their termination, not excepting the appendicula vermiformis. It resembles honey-comb in its appearance, more than any thing else to which I can compare it; but it is so very minute and delicate in every part of the large intestines, that it cannot be well distinguished, excepting with the aid of a magnifying glass. The glands, on the contrary, of the large intestines, appear very distinct in the sulphurous acid, and their orifices are easily seen." 240.

Dr. D. now proceeds to the more complicated structures, beginning with the nerves. We cannot give the following short passage in fewer words than the author has done.

"By rendering the fibrous neurilema, and the connecting cellular tissue, semi-transparent, and by expanding these textures, the sulphurous acid has a remarkable effect in displaying the nerves, with the exception of the ganglionic. It shews, almost without dissection, and still better when aided by dissection, which it facilitates, the parts of each fasciculus of nerves and their junctions; and, if the nerve be cut, the proportion of the medullary matter which it contains, which becomes projecting, squeezed out, owing to the pressure just alluded to. It shows very distinctly the fibrous nature of the optic nerves beyond their junction; but, at their junction, and towards their thalami, their substance appears to be exactly similar to the common medullary substance of the cerebrum. It shows the papillae of the tongue to be each the termination of a minute nerve, and this without the aid of a magnifying glass. It demonstrates how, as the nerves proceed from their source, the proportion of medullary matter diminishes, and the thickness of their sheath increases; and this very remarkably in the nerves of the fingers. On the ganglionic nerves, judging from the very few trials which I have yet made, it appears to have but little effect, as if their composition were different from that of the other nerves, as has been lately maintained.

"It displays, too, almost without dissection, the composition of the vessels, and, I may add, of the passages and canals of the body generally; owing to its expanding, in different degrees, the several coats of which they consist." 243.

Dr. Davy thinks the sulphurous acid will prove equally useful in pathological as in simple anatomy. It expands most of the tissues, and has little solvent power on any of them—on coagulable lymph none at all.

"The specimens which I have by me, of diseased parts preserved in this acid, are satisfactory beyond my expectation; not so much as showing the exact diseased appearance, such as it presented itself on dissection, as in giving a correct notion of the nature of the lesion, by magnifying and rendering more distinct the effects of the dis-

ease, contrary to what happens when the morbid parts are immersed in spirits of wine."* 245.

The sulphurous acid, Dr. D. observes, enables one to detect "the slightest relaxation of mucous membranes." We hardly know what the Doctor means by *relaxation*. When a man has got an inflamed *wvula*, he tells you the palate of his throat is "relaxed," or that it is "come down," but surely this is a very vague term to be used by a pathologist. The acid Dr. D. also says, enables us to detect the cicatrices of old ulcers in the intestines. These cicatrices, according to his experience, seem to differ chiefly from sound mucous membrane, in containing no follicles, when the previous ulceration has been deep. When it has been superficial, it exhibits a structure more or less differing from sound membrane. He has in his possession a very delicate specimen of tubercles on a portion of pleura costalis, covered with a fine net-work of coagulable lymph, as distinct as when first immersed—and more distinct than before it was immersed in the acid. A portion of hepatised lung, thus preserved, shows the air-cells filled with an albuminous deposition, and the blood-vessels closed with the same.

"In all the specimens of aneurism which I have examined, and in every instance of tendency to it, I have found the inner and middle coat of the vessel diseased; the latter generally diminished in thickness, and rendered brittle, and sometimes entirely absorbed in the dilated part of a true aneurism, or in the part contiguous to the orifice communicating with the sac of the false; and the inner coat corresponding generally thickened, and corrugated, and easily broken. In many instances, since I have used the sulphurous acid, I have noticed a very strong tendency in the arteries to aneurism, with only insipient dilatation, in which the middle coat of the vessel has been reduced in parts to the thinness of the finest paper, and its colour changed yellow; and the inner membrane admitting of being easily detached from this, has been thickened to thrice or more its thickness in its sound state." 247.

The following precautions are necessary, in order to ensure success.

"1st, It is of consequence that the part to be preserved is immersed in the acid, as soon as possible; for if in the slightest degree putrid, it will not be well preserved, the fluid will become turbid, though frequently changed, and the preparation will not keep.

"2dly, If the part is putrid, as is often the case, when taken from the body, though the *post-mortem* examination is made a few hours after death, it should be immersed in a solution of chlorine in salt and water, till it is deprived of its putrid smell and tendency; then it may be washed clean, and put into the acid solution, without danger of its spoiling.

"3dly, Attention should be paid to the strength of the sulphurous solution, to proportion it to the nature of the part to be preserved, and the object in view in employing it. If the intention is to expand and develop the structure of the parts, for the purpose of demonstration, a strong solution answers best; if merely to preserve a part as little changed as possible, a weak solution is most successful, especially if cuticle, the visible epithelium or tendinous parts, are concerned, as a strong acid separates the former, and partially dissolves the latter." 248.

* "For the purpose of pathological research, the part to be examined may, with advantage, be immersed for a few hours in sulphurous acid, and then transferred to a cylindrical bottle, of thin and very clear glass, full of water, perfectly clear; very slight changes in the delicate structure of the part, before obscure, or not to be distinguished, will become apparent and distinct; and more particularly, very slight lesions and changes, whether recent or old, of the mucous membranes."

XIV.

Pathological and Surgical Observations relating to Injuries of the Brain. By
B. C. BRODIE, F.R.S. and Surgeon to St. George's Hospital.

[Medico-Chirurgical Transactions, Vol. XIV.]

THE history of the world has been rightly denominated the history of a ceaseless train of revolutions, physical, political, and moral. Ever changing, ever changed, the features and creatures of yesterday are vanishing, or vanished, to-day: and man, proud man, the architect alike of cities and systems, the founder of nations, and inventor of sciences, sinks by the law of nature to the dust, that dust to which his cities, his systems, and too often his sciences, follow him. Creeds of physic, like religions, "take their turn;" Hippocratists give way to Brownonians—Brownonians to disciples of Broussais—the Humorists have been routed by the Solidists, and at present, there appears to be some probability of the Solidists being again dispossessed of their sway by the Humorists! Whilst physic, as a whole, is submitting to changes, its fractional parts, the cantons or divisions, as it were, of the republic, are also the prey to revolutions. Take, for instance, the head, and the treatment of the injuries to which it is subject. What varieties of opinion and practice have existed—what doubt and uncertainty unhappily exist! In the days of Mr. Pott, the trephine was in constant requisition, whilst, since the publication of the work of Mr. Abernethy, it has almost grown rusty in its case!

Though theories, however, are changing, some now in their decline, and some irrecoverably fallen, *facts* still remain. The theorist in medicine may be right or may be wrong, but the patient and industrious collector of facts is conferring an inestimable boon on the profession, and surely, if slowly, contributing to its improvement. The paper, to the analysis of which we are proceeding, is eminently rich in the *matériel* of science, authenticated cases and practical observations. Such a paper as this may excite less éclat than one that is adorned with the sallies of imagination, the refinements of ingenuity, and the touches of sarcasm, but its value will remain, when much of the ephemeral interests of its rival has subsided. The labour in constructing such a paper must be great, especially to one like Mr. Brodie, engaged in the most extensive practice of the day. A theory may be engendered and brought to maturity in the closet, but the observation of almost innumerable cases must have occupied many a wearisome hour in the wards of the hospital and chambers of the sick, whilst the time which is spent in recording them, must inevitably be snatched from the very brief interval of repose, if repose it can be called, that a man at the summit of his profession can enjoy! Of Mr. Brodie's experience, and the practical value of any thing which proceeds from his pen, the public are

already so very well aware, that comment on either is totally unnecessary. The greatest advantage we can render the profession, and most flattering compliment we can pay to the author, is not by indulging in laboured panegyric, but giving a full and impartial account of the *littera scripta*—the paper in question.

Mr. Brodie has considered it necessary to do, what none, we are sure, will ever deem it necessary to do *for* him, viz. apologize for writing on the subject.

"If any apology be necessary for this undertaking, I may remark, that I have been led to it by the great importance of the subject, and also by this consideration, that, although much information may lie, as it were, scattered throughout the mass of surgical literature, no practical writer, as far as I know, has attempted to make such a collection and arrangement of facts as will enable the surgical student to take a distinct and connected view of all the parts of this curious and interesting inquiry. The present paper contains only a part of the observations which I have to offer, namely, those which relate to the first or immediate consequences of the injury. Should these be favourably received, I shall venture, on a future occasion, to communicate to the Society a second series of observations relating to those more remote consequences which are connected with inflammation of the brain and its membranes, or which arise after inflammation has subsided." 2.

The paper is systematically divided into sections, each section embracing the consideration of some particular point of importance. The subject of the first is:—

THE IMMEDIATE EFFECTS OF INJURIES OF THE HEAD, AS INDICATED BY DISSECTION.

Though various, and variously complicated, these admit of being classed under the following heads:—1mo. Simple contusion of the scalp, with extravasation of blood between it and the tendon of the occipito-frontalis, or between the latter and the pericranium, or between the pericranium and the bone. The sensation of depression of bone which is given to the fingers by the margin of extravasated blood, is familiar to all. 2do. The scalp may be lacerated, or the pericranium itself may be torn from the bone; the latter the more serious injury of the two. 3tio. The small vessels connecting the dura mater to the bone may be ruptured at the part where the injury is inflicted, and the dura mater separated to a greater or less extent. This is not an unfrequent occurrence, and at times the separation is very extensive. In the case of a boy at St. George's Hospital, who had fallen from a height of fifty feet, besides a large extravasation on the inferior surface of the brain, the dura mater was every where separated from the bone, except at the basis of the cranium, and the outside of the membrane had a sloughy appearance. 4to. There are many varieties of fracture. In most instances it occurs at the upper part of the skull, whilst that at the basis is always the consequence of violent injury, and generally fatal, because it is almost invariably accompanied with lesion of other more important parts.

With regard to what the French have denominated the *contre-coup*

Mr. Brodie does not absolutely deny its occurrence, but remarks that his own experience very nearly coincides with Mr. Earle's, who has not known a fracture of this kind take place, except where the blow appears to have so operated, as to impel the occiput with force against the atlas, the line of fracture passing through the former bone, where it rests upon the latter. Some cases of contre-coup are recorded in the Memoirs of the French Academy of Surgery, but in many of them, there seems to be no sufficient evidence that the fracture did not really arise from a second blow, inflicted on another part of the head. In the cases adduced by Mr. Bell, the fracture extended across the occiput, in one case passing through, and in the other case passing close to the foramen magnum.

In all cases of fracture of the cranium, with depression, the inner table is broken more extensively than the outer, sometimes, indeed, distinctly depressed, whilst scarcely a fissure exists in the latter. Instances are related by Tulpus, Parey, and Dr. Hennen, in his Treatise on Military Surgery, where the outer table was sound, whilst the inner was extensively fissured, broken into splinters, or actually driven for more than half an inch, into the membranes of the brain.

5to. The skull of a child is frequently indented after the infliction of a blow, and restored in a few days to its natural level, without the assistance of art. Mr. Brodie supposes that the earthy part of the bone, in these cases, gives way, while the animal portion is entire, preventing a fracture, or actual solution of continuity, and allowing the pulsations of the brain to remove the depression. 6to. The disjunction of the sutures, which is rare, and can of course only happen in early life, when the sutures are not yet consolidated, is always to be reckoned peculiarly dangerous, as the force that must produce it is so great, as, in all probability, to cause other and serious injuries.

7mo. Extravasations of blood may occur between the bone and the dura mater, from the rupture of the small vessels by which they are connected, or laceration of the branches or the trunk of the arteria meningeae media. Mr. Brodie's experience confirms the opinion advanced by Mr. Abernethy, that dangerous extravasation is never produced, except where the latter has been wounded, an accident which seldom takes place, except in combination with fracture of the bony canal which protects it. Extravasation may also occur within the dura mater, and here it is generally collected between the latter and the tunica arachnoides; sometimes, but rarely, in the ventricles; at others, in the substance of the brain, or the cellular texture between the arachnoid and pia mater. Large extravasations more frequently are found on the basis than the superior aspect of the brain, in consequence of the irregularities on the surface of the former, the hæmorrhage being usually dependent on a rupture of the substance of the cerebrum or cerebellum. As the laceration of the brain but seldom occurs at

the spot when the blow is received, it may be said with propriety to afford an example of the *contre-coup*. Wounds of the sinuses, though bleeding profusely, when the blood can escape by a free opening in the bone, are not, in Mr. Brodie's opinion very dangerous, the hæmorrhage being readily suppressed by a very slight pressure. The bleeding from the ear which occasionally occurs, especially where the basis of the cranium is fractured, must in most instances arise from a laceration of the lateral sinus, as it lies behind the external meatus and the petrous portion of the temporal bone. In a case in which there was bleeding from the ear and the nostrils, it was found, on dissection, to proceed from a laceration of the cavernous sinus. There may take place all descriptions of wounds of the brain and its membranes, lacerated, punctured, and incised; with loss of substance or without it; complicated or not with the effects of contusion already described.

SEC. II.—CONCUSSION OF THE BRAIN.

Wounds, lacerations, and compression of the brain may, indeed generally must, impair or destroy the functions of the organ, but still it is evident that other injuries, as fissures, disjunction of the sutures, or separation of the pericranium or dura mater, can scarcely of themselves, produce such effects in the first instance. A man gets a blow upon the head, becomes insensible, and dies. On examination, the brain and its membranes are sound, and this stunning or concussion does not seem to depend on any cognizable derangement of structure.

"We are not however justified in the conclusion that there is therefore in reality no organic injury. It is difficult to conceive in what other manner concussion of the brain can operate so as to produce the effects which it is known to produce; and if we consider that the ultimate structure of the brain is on so minute a scale that our senses are incapable of detecting it, it is evident that there may be changes and alterations of structure, which our senses are incapable of detecting also. The speedy subsiding of the symptoms of concussion does not contradict this opinion. A deep incised wound in other parts of the body may, under certain circumstances, be completely and firmly united in the space of twenty-four hours; and it is easy to suppose that the effects of a much slighter injury may be repaired in a still shorter space of time." 14.

The grades and the duration of concussion are various. The patient may recover in the course of a few minutes, or the total insensibility be succeeded by a state, in which the sensibility is impaired, but not destroyed.

"The patient is not affected by ordinary impressions, but if spoken to in a loud tone of voice, he will shift his position, and answer in a peevish manner. Sometimes he is in a state of imperfect delirium, talking in an incoherent and rambling manner, as if intoxicated. The pupils contract on exposure to light, and are sometimes more contracted than under ordinary circumstances. There is no paralysis. The respiration in the great majority of cases is performed easily and naturally; in a few instances only it is laboured, and approaching to being stertorous." 14.

These symptoms may subside in a very few hours, or continue for three or four days, the sensibility in the latter case frequently returning for a time, but only again to be speedily lost. Where inflammation is the sequence of

concussion, there may be a considerable interval of sense, or the symptoms of the latter may gradually and imperceptibly be converted into those of the former.

Concussion of the brain is mostly accompanied with head-ache, sometimes but transient, at others intense, and remaining for days "a solitary symptom, after all other symptoms are vanished." Sickness and vomiting are early symptoms and generally soon pass away. The patient of course retains no recollection of aught that occurred during the state of concussion or insensibility, but frequently the memory is affected to a greater extent. The case of the Welsh labourer in St. Thomas's Hospital, who forgot all his English, but remembered the Welsh, and the parallel instance of the German sugar-baker, recorded by Sir Astley Cooper are celebrated and amusing examples of the fact. Two cases where the patients lost all recollection of what they were doing immediately antecedent to the accident, are recorded by Mr. Brodie, and allusion is made to the still more remarkable case of Dessault, where, after a blow upon the head, the man could remember *recent* events only, but afterwards experienced a change, his memory failing him in these, and merely retaining what had happened in his childhood. Independent as the action of the heart appears, to a certain extent, to be of the influence of the brain, the circulation in concussion is generally more or less affected. The pulse is intermitting, irregular, feeble, perhaps scarcely perceptible, whilst the patient is in a condition approaching to syncope, a condition that may obtain for some minutes, or even for four or five hours. In those cases, they are rare, in which concussion proves fatal, the immediate cause of death appears to be this disturbance of the action of the heart. The re-action, which is generally felt, never comes, or coming is imperfect—the feebleness and irregularity of the pulse are increased—the extremities grow cold—the heart fails entirely—and the patient expires.

SECT. III.—COMPRESSION OF THE BRAIN.

That the functions of the brain are impaired when the cavity of the cranium is by any case suddenly diminished, there is no dispute whatever, although the physiological rationale of the phenomena is the source of a great deal of difference of opinion. Mr. Brodie agrees with Mr. Bell in believing, that the substance of the brain is compressible, and, therefore, that what is called "compression" of the brain, operates simply by lessening the diameter of its blood-vessels and preventing that supply of arterial blood which is necessary for the proper performance of its functions.

"It may, however, be urged on the other hand, first, that in some cases symptoms similar to those which arise from compression, take place where there is a preternatural determination of blood to the head; where the vessels instead of being empty are actually overloaded; and that in these cases the symptoms are relieved by drawing

blood from the jugular vein, or from the veins of the arm : as if the pressure occasioned by too much blood in the vessels was productive of nearly the same effects on the brain, with that arising from blood in a state of extravasation : secondly, that, although we admit the substance of the brain to be incapable of being compressed into a smaller compass, yet that the effect of all pressure on it must be, and is, to alter the position and relative situation of the delicate fibres of which its minute structure is composed, and that we need seek no further explanation of the symptoms which are met with in these cases." 20.

We certainly think that the explanation of the symptoms of compression must be sought for elsewhere, than the paucity of arterial blood in the vessels of the brain. In syncope from hæmorrhage, the brain is not duly supplied by scarlet blood, but a state is produced, which has little analogy as regards the phenomena it presents, with that which obtains in cases of compression.

Although, for the most part, an extensive depression is attended with more danger than a slight one, a large extravasation than a small, the production of symptoms is often dissimilar in different cases, though the injury, *cæteris paribus*, is the same. Pressure, on the whole, is more dangerous at the base than the upper part of the brain, and it seems to Mr. Brodie, that a given quantity of blood between the tunica arachnoides and pia mater, produces worse symptoms than when it is collected in a mass, and occasions less general pressure.

After making these preliminary observations, Mr. Brodie proceeds to consider the particular symptoms of compression. That the *pain in the head* may in some cases depend on the concussion which the brain has received, is very probable, but that sometimes it is wholly and solely occasioned by the pressure on the brain is proved by a case of Mr. Brodie's, where immediately after the elevation of the depression this symptom entirely disappeared. 2. *Insensibility*. This may be either incomplete, the patient being capable of being roused by powerful impressions on his senses, or total and complete. When the cause is depression of bone, the insensibility is developed immediately after the infliction of the injury, but where it depends on extravasation of blood, the extravasation, in many cases, taking place slowly, an interval of time, as an hour for instance, may elapse before it shows itself. Insensibility may depend on concussion in the first instance, in which case the patient may recover, and gradually relapse into the state of insensibility again, as the blood is effused within the cranium. This observation is important as regards the diagnosis of these different species of injury. The insensibility dependent on actual compression is liable to variation, the patient at one time recovering some consciousness, and then again relapsing, whilst blood-letting is followed by increase of sensibility, which departs as the effect of the remedy subsides.

"If these observations be correct, it is evident that there is not any such difference in the character of the insensibility produced by concussion, and that produced by compression of the brain, as will enable us at once, and in all cases, to distinguish these two kinds of injury from each other. Those who are led to take a different view of the subject, may indeed urge, that in some cases there is considerable

pressure on the brain, without any symptoms at all; and that when, in a case of fracture and depression of the cranium, or extravasation of blood within the cranium, the patient lies with a partial loss of sense, this is to be attributed not to the actual pressure, but to the concussion of the brain, which the violence inflicted must necessarily have occasioned in a greater or less degree. I might however refer to several cases, to which this explanation cannot be well applied; but a single example will be sufficient. A woman received a blow on the head; after which she was able to walk home, complaining that her head was hurt, and that she had received her death blow. In an hour after the accident, she gradually became insensible. About fourteen hours afterwards she was brought to St. George's Hospital, labouring under symptoms precisely corresponding to those which have been described by Mr. Abernethy, as arising from concussion. These symptoms continued, and even rather abated than increased, until the third day, when an aggravation of them took place, and she expired. On examining the body, eight ounces of blood were found effused underneath the dura mater. The circumstance of there having been no loss of sense in the first instance, and the interval of an hour which elapsed between the period of the accident and that of the occurrence of the symptoms, sufficiently demonstrate that they were the consequence of pressure produced by the hæmorrhage, and not of the concussion.' 24.

In some cases, affection of a particular sense or partial insensibility only is observed. An old man who suffered from fracture with depression of one of the parietal bones, though slow in giving answers, was otherwise sensible, save that he was noticed to be totally blind. The trephine was applied, but the symptoms continued, and on the fifth day after the accident, he died. The membranes of the brain were found inflamed, and a fracture extended across the sphenoid bone, the edges of which pressed on the optic nerves immediately behind the orbit, and accounted for the total loss of sight. Cases of numbness, or loss of sensation in a particular part, after symptoms of compression are not very uncommon.

3. *Paralysis.* In cases where sensibility is totally destroyed, paralysis is complete, the bladder becoming distended with urine, and the fæces involuntarily discharged. The muscles of respiration are afterwards affected; the breathing is stertorous, the diaphragm contracts at longer and longer intervals, and finally ceases to act altogether, the paralysis of these muscles constituting in fact the immediate cause of death in ordinary cases of pressure on the brain. Where the loss of sense is imperfect, there are often no marks of paralysis whatever; at other times the patient is affected with hemiplegia, which may even be permanent, although he should otherwise recover. Hemiplegia, however, is infinitely more common after apoplexy than accidental injury to the brain, which would seem to arise from the extravasation, in the former case, being seated in the ventricles or substance of the brain: in the latter, most commonly on the surface. The paralysis may affect only one set of muscles, or even a single one, as in ptosis of the eye-lid. In cases of injury, the hemiplegia is observed on the opposite side of the body, which does not apply to more partial paralytic affections. A gentleman struck the side of his head against a carriage wheel, and produced an ecchymosis of the left cheek and temple, accompanied with bleeding from the ear and paralysis of the muscles sup-

plied by the portio dura. The gentleman recovered in the course of three months, and there cannot be a doubt that the pressure was produced on the portio dura, and not upon the brain. The case is exactly analogous to those which are described by Mr. Bell, and frequently met with in practice. Mr. Brodie has known ptosis of the left upper eye-lid, connected with pressure on the nerve of the third pair, immediately behind the *left cavernous sinus*.

4. *Convulsive Actions of the Muscles.* Slight and partial convulsive twitches are sometimes observed in one side of the body, whilst the other is affected with palsy. In the cases of this kind that have fallen under Mr. Brodie's observation, when pressure has existed on the brain it has always been accompanied with wound or laceration of its substance.

5. *Affections of the Pupils.* These vary extremely, and even under circumstances apparently similar, although, for the most part, the pupils are insensible and motionless—generally dilated, but sometimes contracted. Sometimes, and without apparent cause, dilatation gives way to contraction, and the latter again to dilatation. If the pupils were dilated, contraction not unfrequently follows the abstraction of blood, the dilatation returning as the immediate effect of the blood-letting ceases. Reversing the phenomena commonly observed, dilatation has followed an *increase* of light, and contraction its *diminution*—one pupil has been dilated, the other being natural or even contracted; and again, in a fracture with depression above the right superciliary ridge, both pupils were dilated and equally insensible, but regained their sensibility on raising the depression. A pupil may continue insensible to light, without the concurrence of general insensibility, or, indeed, without any loss of vision whatever. This happened in a gentleman, accompanied with ptosis of the right upper eye-lid, and numbness of the right hand, a year nearly elapsing before the pupil recovered its natural condition.

6. *Affection of the Circulation.* The effect of compression on the circulation is not constant, sometimes not present at all. Mr. Abernethy has observed, that intermissions of the pulse are less frequent in compression than concussion, but Mr. Brodie believes that the former affects, for the most part, the action of the heart by causing its contractions to be either less frequent or forcible than natural. In a child at St. George's with fracture of the parietal bone and neighbouring portions of the temporal and occipital, the pulse at the wrist was barely perceptible; but, at the instant of raising the depression, grew distinct and even strong. In another case, the pulse, which before the operation was forty, rose to sixty in the minute immediately afterwards. It strikes us, that some degree of fallacy exists in these observations on the pulse. The patient, it should be remembered, is undergoing a severe and tedious operation, generally attended with little

loss of blood, and exceedingly likely to quicken the action of the heart, independent of the removal of pressure from the brain. In a fatal case of concussion, accompanied with slight extravasation in the substance of the brain, it was necessary to secure some vessel which was wounded by the blow upon the scalp. The pulse rose distinctly during the performance of this slight operation, though, of course, it could have no immediate effect upon the brain, and the patient continued insensible, though struggling indeed, as they commonly do, under the influence of the pain. In another case which we witnessed of compound fracture and depression of the temporal bone, which proved fatal in a very short time, the pulse rose remarkably during the application of the trephine, but it evidently depended on the general excitement.

7. *Sickness and Vomiting.* These can scarcely be ranked among the symptoms of compression, being far from uniformly present. Mr. Brodie has known them succeed the elevation of the depression, though the patient showed no disposition to them previously.

The combination and duration of the symptoms of compression are exceedingly various, one patient dying in three or four hours, and another surviving for several days under circumstances apparently similar. In those who recover, a similar want of uniformity is observed, and in fatal cases the symptoms are not regular in their march, halting at times, and then hurrying on with accelerated pace. Secondary hæmorrhage occurring not unfrequently in other situations, it becomes a very interesting question if it ever takes place in the brain. A middle-aged man having fallen from a cart with his head upon the pavement, was bled by a practitioner, brought to St. George's, and there bled again. On the following day he complained of some head-ach, but was otherwise well, and continued so till the morning of the 4th day from the accident, when he was suddenly seized with the symptoms of apoplexy, and died in half an hour. A thin layer of blood was effused between the pia mater and tunica arachnoides, at the posterior part of the hemispheres of the cerebrum. Besides this, at the lower part of the right anterior lobe, the substance of the brain had been ruptured, and a recent extravasation of blood, amounting to about two ounces and a half was discovered between the arachnoid and dura mater. This is certainly very like secondary hæmorrhage, and probably, as Mr. B. observes, its occurrence would be oftener remarked, were it not for the rigid antiphlogistic regimen which is usually adopted in injuries of the head.

SECT. IV.—WOUNDS OF THE BRAIN AND ITS MEMBRANES.

Wounds of the dura mater are not productive of serious consequences till the period of inflammation has arrived; whilst those of the arachnoid and pia mater can scarcely take place independently of wounds of the sub-

stance of the brain. The physiologist, as he slices off portions of the brain, deprives the subject of his experiments of function after function. The same distinct results are, however, not the consequence of accidental wounds, the complications of which with concussion, extravasation, or depression of bone, are so various and extensive as to prevent the effects of any given injury in a given situation, being calculated with any degree of precision. Two cases are detailed from Morgagni and Dr. Hennen, in one of which a sharp instrument passed between the roof of the orbit and the eye, and pierced through the substance of the cerebrum to within a finger's breadth of the lateral ventricle. In the other, a ramrod entered below the nasal process of the os frontis, and penetrated an inch into the anterior lobe of the cerebrum. This patient, in whom the injury appears to be the slightest, was killed upon the spot, whilst the other presented not a symptom until the third day, when suppuration was established. As a general rule, the functions of the brain are but little impaired, if at all, in the first instance, by penetrating wounds of its substance. A patient, indeed, may go on from day to day, with portions of brain oozing out from an aperture in the cranium, without any affection of the functions of body or mind. Extensive destruction, however, of the brain, is generally followed by death, either immediate or occurring in the course of a very few hours. It has seemed to Mr. Brodie, that in other cases of extensive laceration of the brain, independent of the actual insensibility of concussion, "there obtained a confusion of intellect beyond that which concussion usually produces." In many cases there are twitchings of the muscles of the extremities; in one, where the parietal bone was fractured, and splinters driven in upon the cerebrum, the opposite pupil continued preternaturally dilated when the splinters were removed, though nothing but the wound apparently remained. The pulse, as in cases of pressure, is sometimes unnaturally slow, but the symptoms are seldom so urgent, the danger not being immediate, but depending on the violence of the after-inflammation.

SECT. V.—ON SOME OTHER SYMPTOMS FOLLOWING INJURIES OF THE BRAIN.

The symptoms to which this section is confined shew themselves anterior to the occurrence of inflammation, but present an anomalous character, and cannot be fairly considered under any of the preceding heads. Thus, a middle-aged man was admitted into hospital with the symptoms of concussion, which subsided in one or two hours, but left irremediable deafness. A young woman was stunned by a blow upon the head, and after recovering from its immediate effects, was entirely deprived of the senses of smell and taste, in which state she continued at the end of a month, when Mr. Brodie saw her. Such numbers of cases of this kind are on record, that we deem it unnecessary to follow Mr. Brodie through several very interesting il-

illustrations. These cases are distinguished by the absence of the symptoms of compression of the brain, and are infinitely more difficult to account for satisfactorily than a person at first would imagine.

"It is indeed difficult to conceive that pressure on the brain should exist in so great a degree as completely to destroy an entire class of sensations, and at the same time be so partial as not to affect any other function of the nervous system. On the other hand it is also difficult to regard these as the effects of concussion of the brain: since it is one of the characteristics of concussion to produce no more than a diminution of sensibility, and that diminution, instead of continuing for months or years, is completely relieved in the course of a few days, and probably in a much shorter space of time." 42.

Dr. Hennen gives the history of a patient, who lost his sexual powers after wounds of the occiput, and various instances of a similar description are met with in authors. The sight has been frequently impaired whilst the faculty of hearing remained, and sight has continued whilst speech has been lost. Stammering, we believe, is an occasional consequence of blows upon the head.

In some cases the patient is seized with convulsions, a good deal resembling those of epilepsy, though differing from the latter in not being succeeded by stupor or sleep. Though formidable in appearance, they frequently subside without any unfavourable symptom. In the case of a butcher, who was struck on the head by a beam, venesection was employed without relief, but, after continuing three hours, the convulsions suddenly subsided, leaving him sensible, but affected with pain in the head, which required two or three bleedings in the course of the ensuing week or ten days. In the case of a gentleman, who, in addition to a fracture communicating with the elbow-joint, got a blow upon the head, which occasioned a considerable scalp-wound and fracture of the os frontis, unattended with depression, the convulsions came on in the course of a few minutes, were exceedingly violent, but subsided in about half an hour. The gentleman recovered. In some cases, the patient is affected with convulsions, not immediately after the occurrence of the accident, but after the lapse of several days. In such it must often be difficult to determine to which the convulsions are referrible—the original mischief or subsequent inflammation. A lad received a blow upon the head, insensibility followed, but he moaned when disturbed, the pupils were obedient to the light, and neither stertor nor paralysis were present. The symptoms subsided, no appearance of inflammation came on, but the patient was seized at the end of five days, with general convulsions. He was cupped without relief, and, in the course of the succeeding twenty-four hours, he had as many as fourteen or fifteen attacks, each lasting from one to three minutes. On the following day the symptoms not indicating bleeding, the patient was prevailed on to swallow some toast and beef-tea, from the commencement of which practice the convulsions abated, and in the course of another day wholly disappeared. This case, as Mr. Brodie observes, seems to prove that the convulsions, at

this late or rather secondary period, depended on the original mischief, and not on inflammation. In two of the cases detailed, the other symptoms were probably those of concussion, but Mr. Brodie suspects that more than concussion is required to produce these attacks of convulsions, or, at any rate, that they may be brought on by other causes. Mr. Brodie is led to this opinion by observing in experiments on animals, that a wound on the basis of the brain, which produces extravasation of blood upon its surface, in general gives rise to convulsions, previous to that state of paralysis and stupor which immediately precedes the creature's death. In the next place, the symptoms of concussion are most complete immediately after the infliction of the injury, whilst convulsions do not occur until after a certain lapse of time, when extravasation may possibly have begun to take place. Finally, in a case that occurred to Mr. Keate, when convulsions came on at the end of two days, and persisted in spite of the abstraction of a quantity of blood from the arm, an incision was made through the scalp at the part which was injured—a fracture discovered with trifling depression—the depression removed with a saw—and a coagulum of blood found lying on the dura mater, which having been exposed, the convulsions disappeared and returned no more.

"I have not observed convulsions to take place where there are symptoms indicating the existence of considerable pressure on the brain. The pressure in these cases does not destroy the functions of the brain; it seems to act merely as a cause of irritation, and the operation of it may be compared to that of an exostosis, or other tumour, in producing fits of epilepsy. The circumstance of convulsions taking place after the lapse of some days when they did not take place in the first instance, may probably depend on the brain having been rendered more susceptible by the loss of blood and other methods of depletion, to which it was necessary to have recourse for the relief of the more early symptoms." 48.

An occasional consequence of injuries of the head, is furious delirium. Though present in cases apparently of concussion, still we are not sure that no degree of pressure existed on the brain, whilst instances occur in which this condition of sensorium is manifestly combined with depression of bone, or extravasated blood. Some interesting cases are detailed by Mr. B. in illustration. In the first, the delirium subsided on blood being taken from the arm, and the patient remained with slight symptoms only of concussion, from which he completely recovered. In the second case the frontal bone was fractured and depressed. The depression was not raised, as the delirium subsided on blood being taken from the arm, when the patient fell into a state of insensibility, from which he recovered, though the pupil of the right eye continued preternaturally dilated. A middle-aged man broke his arm, and received in addition, compound fracture, with slight depression of the left parietal bone. The only symptom that was noticed was dilatation of the right pupil, but during the process of shaving the head, he was seized with delirium. He was bled with relief—relapsed again—and was a second time bled with advantage. Remaining insensible, the trephine was applied,

but although he experienced a return of sensibility, stupor supervened, and terminated fatally. A disjunction of the coronal suture was discovered—more than a drachm of blood extravasated between the dura mater, on the right side, and frontal and parietal bones—a partial and slight extravasation between the tunica arachnoides and pia mater—and lastly, a small quantity of pus both over the dura mater, and between the arachnoid and pia mater. In another case, delirium was followed by stupor, which was relieved by the abstraction of twenty ounces of blood, but again reappeared. One pupil was dilated, but the patient recovered. In this case, there was probably pressure on the brain and it seems that delirium, like convulsions, is produced by such pressure as acts as a source of irritation, without being so extensive as completely to annihilate the functions of the organ.

We now arrive at the subject of treatment, and first, of the

VI.—TREATMENT OF CONCUSSION OF THE BRAIN.

This occupies the 7th Section of the paper, and is laid down in a clear and exceedingly interesting manner. How important it is that a rational and scientific plan of treatment should be inculcated, and generally pursued, we need scarce inform those who are acquainted, as most men must be, with the doubts, the disputes, and the blunders that are daily and disgracefully occurring.

In the treatment of concussion we are required, as Mr. Brodie observes, to medicate not only for the present but the future—to contribute to the relief of symptoms that exist, and mitigate or prevent the occurrence of after ones. The profession, or at least a good part of it, would seem to be split into two distinct sects, the one recommending the exhibition of stimulants and cordials, the other antiphlogistics and blood-letting. Here, however, as elsewhere, Mr. Brodie believes that the difference of opinion is greater in appearance than reality.

“I suppose that none of those who have suggested the exhibition of stimulants would actually be inclined to apply this practice to cases in which the pulse has regained its strength and regularity; and, on the other hand, I conclude that no one among those who have advised the use of the lancet would think of taking away blood when the patient lies with pale cheeks, and cold extremities, and a feeble and intermitting pulse, or would refuse to resort to the cautious exhibition of cordials and stimulants where these symptoms are so urgent that he is manifestly in danger of sinking, in consequence of the depressed state of the circulation which has followed the first shock of the injury.” 53.

Mr. Brodie, we fear, has let his good nature prevail over justice, in the latter part of the preceding quotation. Cases are, we will not say commonly, but certainly not *very* unfrequently occurring, where patients are bled, or attempted to be bled, with a pulse that can scarcely be felt, and a surface as blanched as a surface may be!

Cases of dangerous depression of the powers are in reality of very rare occurrence, a condition of the system approaching to syncope being generally salutary, and preventing the effusion of blood from the smaller vessels which are frequently ruptured by the blow that produces what we term the concussion. By exhibiting stimulants we endanger this effusion, and consequent symptoms of pressure on the brain, whilst keeping down the action of the heart, by bleeding on the rise of the pulse to a sufficient amount, will probably often succeed in arresting it entirely, or checking what might otherwise be fatal. We should also bear in mind, that depression is followed by excitement; the pulse, as the patient recovers, growing fuller and stronger than natural, and affording an additional argument in favour of the practice recommended above. Whilst we carefully guard against present extravasation, we should also remember that secondary hæmorrhage, a case of which has already been detailed, may possibly occur within the cranium. However small the chance, says Mr. B., the surgeon should provide against it by frequently inquiring into the condition of his patient, by enjoining repose both of body and mind, by a scanty and vegetable diet, the exhibition of laxatives, and abstraction of blood whenever it is warranted by the state of the pulse. Whilst Mr. Brodie is of opinion that the patient would generally recover spontaneously from the state of insensibility into which he is plunged, still there cannot be a doubt that recovery is assisted by low diet, repose, and depletion. Besides, inflammation of the brain, or its membranes, is surely less likely to occur where depletion has been carried to a *moderate extent*, than when it has been totally neglected. We have said the depletion should be moderate, for Mr. B. remarks that the surgeon may err in employing the lancet too freely. If very large quantities of blood are abstracted, and inflammation is afterwards developed, the hands of the practitioner are tied, his resources are crippled, and, to use the expression of an eminent surgeon, the patient can neither support the disease nor the doctor! Mr. Brodie recommends that at first when reaction has occurred, the patient should lose such a quantity of blood as completely to subdue the force of the circulation, but that afterwards, the bleeding be occasional only, and then to a moderate extent. The following is important.

“Where bleeding has been carried to a great extent, symptoms frequently occur which in reality arise from the loss of blood; but which a superficial observer will be led to attribute to the injury itself, and concerning which indeed it is sometimes difficult, even for the most experienced surgeon, to pronounce in the first instance to which of these two causes they are to be referred. Repeated copious blood-letting is of itself adequate to produce a hardness of the pulse, which we shall in vain endeavour to subdue by persevering in the same system of treatment. In many individuals it will produce head-ach and confusion of mind, not very different from what the injury itself had previously occasioned. These things may be observed especially in young females who are disposed to hysteria; and whom I have often known to suffer from a continued aggravation of such symptoms as I have described, while the system of depletion has been continued, recovering immediately on the use of the lancet being

laid aside, and on their being allowed to take solid nourishment, with occasional doses of the carbonate of ammonia."* p. 58.

In all cases of injury of the brain, the head and shoulders should be raised by additional pillows.† In bad cases the head should be shaved, and cold lotion constantly applied. Opiates are injurious, as they constipate the bowels, and occasion a head-ach of which it is difficult to determine, whether it belongs to the injury or opium.

SECT. VII.—TREATMENT OF COMPRESSION OF THE BRAIN.

This is necessarily more complicated than that of concussion, and does not admit of such simple or general rules. This section is dedicated to the subject of pressure on the brain, without any wound of the dura mater. Mr. Brodie sets out with the general principle, that where the symptoms of compression are such that the life of the patient is in danger, the cause should unquestionably be removed, where that can be done, by a surgical operation.

The most common cause of pressure on the brain, is extravasation of blood *within* the cavity of the dura mater, to the consideration of which we shall first proceed, although Mr. Brodie adopt sa different arrangement. If there exist only one large collection, it is mostly at the basis of the cranium, sometimes in the substance of the brain, sometimes betwixt the arachnoid and pia mater, in any case beyond the reach of operations. As a general rule, operations are inapplicable to cases of internal extravasation, but what rule is so general, after all, as never to admit of exceptions? Extravasation may occur upon the surface of the cerebrum, immediately under the dura mater, but what are its symptoms? how can we detect its existence? The man who can answer this question is a cunning or confident diagnost indeed! Suppose, however, that the bone is already removed, and the dura mater exposed, of a blueish tint, and bulging into the aperture, from the pressure of extravasated blood beneath it.

Wounds of this membrane are exceedingly dangerous, and should never be "wantonly" performed; but desperate cases admit either of desperate remedies or none, and the patient, one would think, has a right to that chance, minute as it may be, which division of the dura mater gives him. The combination of circumstances is necessarily rare, but still it *may* occur, and the surgeon *must* meet it.

The late Mr. Chevalier was called to a child, who, after receiving a blow upon the head, became insensible, and affected with convulsions. The

* Dr. Marshall Hall has published, in the thirteenth volume of the Medico-Chirurgical Transactions, some excellent practical observations on the effects of copious blood-letting, many of which are applicable to the cases mentioned above.

† The "air pillows," so much in vogue at present, are convenient.—REV.

scalp was not wounded, but the fontanel appearing to be elevated, M. Chevalier made a crucial incision in the scalp, divided the fontanel by an angular incision on its right side, and, finding the dura mater raised by extravasated blood, cautiously punctured the membrane with a lancet, when the blood spouted out to the distance of a foot. The symptoms were relieved, and the child recovered. A still more remarkable case was communicated to Mr. Brodie, by Mr. Ogle, of Great Russel-street. Having previously related this case, we shall give but a very brief notice of it here. A woman, after receiving a fall upon her head, was found by Mr. O. in a state like that of apoplexy. No wound of the scalp was discovered, but pressure near the anterior superior angle of one of the parietal bones made her flinch very much. The scalp at this spot was divided—no fracture appeared—but the danger being imminent, a portion of bone was removed with the trephine, when the dura mater immediately bulged into the opening, and presented to the fingers the feeling of fluid beneath it. The dura mater was punctured—a jet of blood spirted out to the height of some feet, and the patient, who had hitherto been totally insensible, immediately recovered her senses, and never had a bad symptom afterwards. These cases must be considered Oases in the desert, and quite “out of the common course of events.” Mr. Brodie recommends their being treated like apoplexy, by bleeding from the arm, cupping, saline purges, the local application of cold, and other means, which, though palliative only, will be followed by recovery in many cases where the symptoms of pressure have been urgent. In some instances, the patient recovers, though slowly; in others, there may be partial paralysis—dilatation of a pupil, or some such memento of the accident. So much for extravasation internal to the dura mater.

When the hæmorrhage takes place between the dura mater and bone, an operation is required.

“But here another question arises: what is the evidence which is to enable us to detect a mass of extravasated blood in this situation, and how are we to determine what is the exact part of the cranium which should be perforated by the trephine? I must here refer to an observation which has been already made. Blood is seldom poured out in any considerable quantity between the dura mater and the bone, except in consequence of a laceration of the middle meningeal artery, or one of its principal branches, and it is very rare for this accident to occur, except as a consequence of fracture. If, therefore we find the patient lying in a state of stupor, and on examining the head we discover a fracture, with or without depression, extending in the direction of the middle meningeal artery, although the existence of an extravasation on the surface of the dura mater is not thereby reduced to an absolute certainty, it is rendered highly probable, and the surgeon under these circumstances would neglect his duty if he omitted to apply the trephine.” 61.

If any extravasation is found, the present symptoms are relieved, and the chance of the patient's recovery increased, whilst, if none should exist, his condition can scarcely be worse than before. Where no fracture can be found, if the injury has been inflicted in the situation of the meningeal media, the use of the trephine is a fair speculation, sufficiently justified by

the instances on record of rupture of the artery without any fracture, as well as by the fact, that the inner table may be broken independent of fracture of the outer. The observation of Mr. Abernethy, that the bone will not bleed with its natural freedom and celerity, when blood is extensively effused between it and the dura mater, may possibly assist our judgment. This, however, is a test on which we should rely very little, and, indeed, at the best, it can only apply when the surgeon is already half through his operation.

In applying the trephine for fracture with depression, the removal of a small portion of bone is in general sufficient, but not so in cases of extravasation on the surface of the dura mater. Mr. Brodie was led to this conclusion by a case which occurred to him, where he removed two triangular pieces of bone, and gave vent to a quantity of blood, partly fluid, partly not. Suppuration ensued on the surface of the dura mater, wherever the extravasation had formerly been; the opening in the bone became mostly filled up by granulations; the pus, which was, in consequence, confined, burrowed between and separated the dura mater and bone, and although another portion of the latter was removed, it was followed by scarcely a temporary relief, and the patient unfortunately died. Mr. Brodie believes that if the opening in the bone had been freer in the first instance, the pus which was formed would have found a ready exit, and the patient have probably recovered.

It is very well known that fractures, with extensive depression, may exist, without a corresponding severity of symptoms, or even without any symptoms whatever. An interesting and intricate question arises, as to whether the surgeon should operate or not, a question which is answered in a very different manner by Mr. Abernethy and Sir A. Cooper! In the first place, the removal of part of the cranium is not to be considered a mere *bagatelle*, warranted on slight grounds or no grounds at all. Where the aperture is small, it requires many years to fill it up with new bone, and, where large, the deficiency is never supplied. The defence of the skull-cap is consequently weaker—the cicatrix more readily penetrated or torn—more likely to suffer from the force of concussion than the original bone that was removed. A case is recorded in the Edinburgh Medical Essays, where a child, in a violent fit of the whooping-cough, burst the cicatrix, when the dura mater also gave way, the brain was protruded through the wound, and death was the consequence in the course of five days. 2dly. The operation of the trephine is occasionally followed by sloughing of the dura mater, though previously perfectly healthy. Mr. Brodie has witnessed two cases of this kind, and concludes that the sloughing of the membrane is the consequence of its being deprived of its natural protection, as well as of the loss of the blood it receives through the vessels of the bone.

"If the patient had survived some time longer, what would have happened? The slough of the dura mater would have separated, and the brain, losing the support which it derives from this firm membrane, and having its vessels loaded with blood would, in all probability, have become protruded in the form of what is denominated a *hernia cerebri*. Such a protrusion would not indeed aggravate the danger of the case, where suppuration had already taken place within, but it might make the difference of life or death to the patient where the inflammation had not begun to terminate in this manner." 72.

The cases recorded by Mr. Stanley, in the 8th volume of the *Medico-Chirurgical Transactions*, satisfactorily prove that *hernia cerebri* is liable to follow the mere abstraction of a portion of the cranium. From these considerations Mr. Brodie thinks it obvious, that the operation of trephining is attended in itself with some degree of danger. These are the *cons.* let us now look a little at the *pros.* 1st. Although sloughing of the dura mater and protrusion of the brain are occasional, they cannot be considered as constant sequelæ of the operation of the trephine. 2dly. Notwithstanding depression of the cranium is sometimes unattended with mischief, there are numerous examples to the contrary. Suppuration ensues on the surface of the dura mater, and, ultimately, the matter has no free discharge, the inflammation extends to the arachnoid and pia mater, and speedily ends in the patient's destruction. 3dly. A depression may occasion no mischief at first, but, after a certain lapse of time, be followed by symptoms endangering even the life of the patient. A good many cases of this kind are recorded, one or two, we believe, by Sir A. Cooper, in his *Surgical Lectures*. Mr. Brodie alludes to the case of a gentleman, published by Sir Everard Home, in the *Philosophical Transactions* for 1814. The depression was, in its longest diameter, two inches and a quarter, and an inch and a half in its shortest, and in one part nearly three quarters of an inch below the natural level. At the end of six weeks the early symptoms had subsided, but, as soon as he returned to his usual occupations, various nervous phenomena showed themselves, which, instead of diminishing, increased in severity, and led Sir E. at the end of three years, to remove nearly the whole of the depression by means of the trephine. The symptoms were relieved, and returned no more. Mr. Brodie believes that these ultimate ill-consequences might perhaps be avoided, if the rule were observed, to trephine where the depression is deep or extensive. This rule is inapplicable, of course, to cases of suppuration between the bone and the dura mater, which latter is as likely to occur where the depression is small as where it is large.

The majority of our readers must be very well aware that Sir A. Cooper, in his *Lectures* has drawn a distinction between simple and compound fractures of the skull; inflammation and suppuration of the membranes of the brain being infinitely more liable, according to the Baronet, to occur in the latter variety of injury than the former. In compound fracture with depression, Sir Astley immediately applies the trephine—in simple, he does not, unless, indeed, the symptoms imperiously demand it. Though many individuals recover in whom the more serious injury existed, and for which no operation whatever was performed,* the question, nevertheless, is not

* The following statement, furnished to Mr. Brodie by his friend Mr. Rose, is strongly illustrative of this.

"In the battle of Talavera de la Reyna, which was fought on the 27th and 28th of July 1809, the brigade of guards lost about 600 men in killed and wounded. Amongst the latter were a considerable number of cases of wounds in the head. There were a great many cases of fracture of the bones of the cranium with and without depression, and from the cause which produced them, these were, of course, in every instance complicated with wounds of the scalp.

to be decided in so hasty and summary a manner. The science of medicine is a science of conjecture, and that plan of treatment is accounted the best which has merely the balance of chances in its favour. If, then, it shall be found from the results of experience, that a greater probability exists of suppuration occurring in those cases of fracture where the scalp is wounded also, than where it is not, Sir Astley's opinion is substantially correct. Mr. Brodie at first was inclined to dispute it, but, on looking over notes which were taken by himself at the bed-side of patients, for the most part before this question had been agitated, he finds that the cases in which suppuration takes place *where the scalp is entire*, have been comparatively rare; bearing but a very small proportion to those where it has succeeded a fracture with scalp-wounds. From attentively considering the whole of the evidence, Mr. Brodie acknowledges that it now appears to him that the views of Sir Astley Cooper are correct, and that, in those cases where depression of bone exists without any symptoms, or trifling ones only, the surgeon can follow no better rule than this;—trephine if it be combined with a wound of the scalp, but if such a wound is not present, let him not make it by a surgical operation. If the cranial depression is extensive, perhaps it would be better to elevate it at all events, not because the danger of suppuration is greater, but on account of the ill-effects which the patient may ultimately experience, if the brain be left subjected to considerable pressure.

A remark of much importance is made by Mr. Brodie, viz. that in cases of compound fracture, the bone may be depressed in such a manner, as to allow of the escape of any matter which may form, although the depression remain. If the abscess can find no outlet whatever, its danger must be infinitely greater. In the case of a boy with compound fracture of the skull, the symptoms were so slight that the trephine was not applied. Eight or nine days after the accident, the pulse being frequent, the countenance anxious, and the patient complaining of pain in the head, the fracture was completely exposed by an incision. Suppuration had occurred beneath the bone, but its edge was so placed, that a very free opening remained for the pus. No further operation was, therefore, performed—the symptoms were relieved—and the patient very shortly recovered. In cases where the scalp remains entire, but the brain and its membranes are wounded by the edges of the fracture and depression, there is reason to suppose that more or less suppuration must necessarily take place, if the parts are exposed by incision of the scalp, while it seems not improbable that the mischief may

“On the 3d of August, in consequence of some military movements, the town of Talavera, in which the hospital had been formed, became exposed, and an order was given for all the wounded who could march, to leave it. This was so speedily obeyed that no time was afforded to make any selection. The worst cases necessarily remained, but among those who undertook the march there were twelve or fourteen with wounds in the head, accompanied with injuries of the bone, at least four or five of whom had both tables of the skull fractured, and two of them, along with fracture of the *os frontis*, had each the globe of one eye totally destroyed. In none of them had the trephine been applied, nor had any attempt been made to remove splinters of bone. After leaving Talavera, they were exposed to a burning sun, and to very severe fatigue. Every evening, after the day's march, Mr. Rose collected the wounded round him, examined and washed their wounds, dressing with care those that particularly required it. Cold water was the principal application employed. The retreat occupied sixteen days, in spite of which, and with no other treatment than that which has been described, every one of those who were wounded in the head recovered.”

be avoided, if this remain entire for their covering and protection. This is an additional inducement to leave the scalp intact in cases of fracture and depression of the cranium.

SECT. VIII.—TREATMENT OF CONTUSIONS AND WOUNDS OF THE SCALP.

Extravasation of blood in the cellular texture of the scalp is sometimes extensive, but mostly requires no particular attention, the swelling spontaneously and gradually diminishing, and in no great length of time disappearing altogether. In the case of a young gentleman, the effusion extended all over the head, from eye-brow to occiput, and ear to ear, but entirely subsided in the course of a few weeks, with no other application than that of cold lotion. In another case which threatened to become as extensive, pressure at the point where the extravasation had begun succeeded in putting a stop to its progress. A child struck its temple, soon after which a swelling appeared, and increased on the following day. Mr. Brodie directed the child to be kept quiet, and ordered the head to be bathed with cold lotion. Next day the swelling having greatly extended, Mr. Brodie ascertained the exact spot which had been struck, and applied such a graduated compress and bandage, as is used after bleeding in the temporal artery. The swelling was by this means totally arrested. Wounds of the scalp, whether punctured or incised, require, in the first instance, no particular treatment. Mr. B. never witnessed injurious effects from the employment of sticking-plaster in wounds of the scalp. Flaps of the scalp, when formed by a wound, should be carefully replaced, and unless the exposure has been long, the contusion considerable, or the surface smeared over with dirt, they generally unite by the first intention. Sometimes the adhesions are partial, suppuration occurring elsewhere, and requiring much care on the part of the surgeon to obviate injury to the bone or pericranium. In cases where the pericranium is detached, the scalp should be also replaced for the chance of the union which frequently takes place in adults, and oftener still in young persons, on account of the greater vascularity of the textures.

SECT. IX.—TREATMENT OF FRACTURES OF THE CRANIUM, UNATTENDED WITH DEPRESSION.

The general opinion in cases of fracture, unattended with depression or evidence of any considerable extravasation between the dura mater and bone, is not to employ the trephine, but only those strict antiphlogistic measures required in all cases of injury of the head. The fractured surfaces being here placed in contact are favourably disposed to unite with each other, whilst removal of a portion of the bone of the cranium is a wanton and ridiculous addition to the mischief. A great part of the section is occupied by Mr. B. in combating the views of Mr. Pott on this subject, but as we believe they are now universally abandoned, we shall content ourselves with stating the general principle; that in fracture of the cranium, unaccompanied by depression, the active interference of art is not required. These cases, however, Mr. Brodie remarks, should always be regarded with a jealous eye, as a danger exists of the formation of matter on the dura mater, especially when the scalp is also wounded and the pericranium separated from the bone. We now pass on to,—

SECT. X.—TREATMENT OF WOUNDS OF THE BRAIN AND ITS MEMBRANES.

Though concussion or compression with this complication is essentially more dangerous than without it, the general treatment is nearly the same—bleeding, purgation, starvation, and repose. Our local means must be mainly directed to prevention of future ill-consequences, the chief of which are—inflammation extending from the wound to the membranes, and producing effusion of serum and pus—inflammation, suppuration, sloughing, and dissolution of the substance of the brain—and, lastly, protrusion of the brain in the form of a *hernia cerebri*. Mr. Brodie insists on avoiding, as much as possible, meddling with the parts. If splinters of bone have penetrated the brain, and admit of being readily extracted without any additional disturbance of the organ, such extraction “cannot be improper, and may probably be useful.” Many have, however, recovered where the splinters have remained, an instance of which occurred to Mr. Brodie; detached fragments of bone continuing imbedded in the brain of a gentleman, and causing no disturbance, many months after the reception of the injury.

“Do not such cases justify us in leaving splinters of bone untouched, where there is any kind of obstacle to their easy extraction? Are they not even sufficient to show that any other mode of proceeding would be improper, and that it is better to leave the patient to take his chance with the splinters lodged in the brain, than to commit the smallest additional violence in an endeavour to remove them?” 90.

The principle holds in wounds of the brain from depression of bone. If the edge of the bone can be readily raised by the elevator or forceps, it may be right to do so; but persons recovering, in whom the depression is allowed to remain, it cannot be advisable to hazard this chance whatever it may be, if the elevation requires such force “as is likely to cause the most trifling additional injury to the wounded brain.” Where no circumstances exist to render the operation absolutely necessary, Mr. Brodie is inclined to doubt its expediency, as the motion of the saw, of little consequence, perhaps, where the membranes are entire, must jar more or less the structure of the brain, when lacerated already and confused. The liability to the occurrence of *hernia cerebri* is here, as elsewhere, an objection to the removal of any considerable portion of the cranium.

If a foreign body lodged in the brain possesses such form and dimensions, that one of its extremities projects externally, it may be easily removed, and probably ought to be extracted at all risks. If the body, however, be a bullet or ball the case is very different. In the first place, the ball can be seldom discovered and extracted without very serious or even fatal violence; and, secondly, numerous instances exist, where patients have survived, though the ball was allowed to remain. Some of these, indeed, have suffered no more than they probably would have done, if the ball had been lodged in any unimportant part of the body. On these accounts, Mr. Brodie proposes, as a general rule, that the extraction of a ball should not be attempted, unless it can be done without the employment of violence, or adding, in any degree, to the mischief already inflicted. On the whole, Mr. Brodie believes that negative is better than active local treatment in most of the cases of wounds of the brain. The proportion of cases that occur in civil hospitals is generally small, the recoveries under every circum-

stance so few, that no one can determine, from his own experience merely, the comparative value of this or that treatment. The safest plan to follow, when deserted by art, is to trust as much as may be to Nature. The following quotation will be read with interest.

"Where the experience of individuals fails, we are called on to look for other sources of information. I have referred to all the cases of wounded brain recorded in the works quoted below,* and the general results which they exhibit will be found not uninteresting, if viewed in their relation to this point of surgical practice. These cases are thirty-eight in number, of which twenty-six terminated favourably, and twelve unfavourably. This, of course, affords no information as to the actual rate of mortality in cases of this description, the fatal cases being for the most part regarded as too much a matter of course to be worthy of publication, while a very different opinion is entertained respecting the cases of recovery. But the following facts afford some useful information as to the circumstances under which recovery takes place.

"In nine cases of wounded brain in which the bone was fractured, but not depressed, no operation whatever was performed. In two of them the patients died; in the remaining seven they recovered.

"In fifteen cases no operation was performed, beyond that of removing some splinters of bone with the forceps. In five of these cases the patients died, while in ten the patients recovered.

"In four cases the wound of the brain was complicated not only with fracture, but with depression of bone. In one of them in which the depressed bone was allowed to remain without being elevated, the patient recovered. In the three remaining cases the depression was elevated with the assistance of the trephine; and one of these patients recovered and two of them died.

"In ten cases a musket ball was lodged in the brain. In two of them the ball was extracted, and one patient recovered, while the other died. In the remaining eight cases the ball was allowed to remain, no attempt being made for its extraction, and two of these patients died, while six of them recovered. Of these last, however, one died several weeks afterwards of inflammation of the brain induced by intemperance in drinking, and another, after having been sufficiently well to resume his duties as a soldier, died in the course of the following year, of what was regarded as a *coup de soleil*.

"It appears then that in fourteen out of twenty-six patients who recovered, no operation whatever was resorted to, and that in ten of the remaining twelve, there was no operation beyond that of removing splinters of bone with the forceps. Of those in whom a ball was extracted from the brain one died, and one recovered; and of those in whom the ball was not extracted two died, and six recovered. It is needless to add, that the conclusions to be deduced from these statements illustrate and confirm the observations which have been already made as to the principles which should direct the surgeon in his treatment of these formidable injuries."†

Mr. Brodie has never been able to discover an instance of recovery from a wound of the posterior lobes of the cerebrum, the cerebellum, or medulla oblongata. In most of the cases the injury was confined to the frontal bone, and that part of the brain which it covers and defends. This is important in assisting, in some measure, the surgeon's diagnosis.

* "Mémoires de l'Académie Royal de Chirurgie.—Transactions of a Society for the Improvement of Medical and Chirurgical Knowledge.—Duncan's Medical Commentaries.—Duncan's Annals of Medicine.—Edinburgh Medical Journal.—Medico-Chirurgical Transactions, Vol. I. to Vol. XII. inclusive.—Le Dran's Observations in Surgery.—Hennen's Military Surgery.—Collection d'Observations Cliniques par M. A. Petit."

† "Since these calculations were made, a very interesting case has been published by Dr. Rogers, in the thirteenth volume of the Medico-Chirurgical Transac-

SECT. XI.

This section concludes the inquiry, and is dedicated to "the treatment of some other cases, not included under the foregoing heads."

In cases of loss of a particular sense, as that of smell, no remedies are indicated beyond what are adapted to ordinary cases of concussion of the brain. The cure, when it occurs, being not so much owing to the skill of the surgeon as the powers of nature. Sometimes the function is permanently lost. When a patient is affected with furious delirium, blood should immediately be taken from the arm, in a full stream if possible. The delirium almost invariably yields, although a relapse may render it necessary to resort to venesection a second or third time, before any permanent relief is obtained. Convulsions occurring under circumstances similar to those of delirium, would seem to require a similar treatment. This though in part is not wholly the case; for bleeding, though indicated in convulsions which immediately follow an accident, is sometimes incapable of arresting them when fairly established. In many cases they continue, notwithstanding the loss of a quantity of blood, subsiding spontaneously at last. Occasionally they occur at the end of some days, it may be, combined with inflammatory symptoms, and require the further employment of the lancet. They may, however, exist without inflammation, being aggravated by bleeding, and only disappearing when the patient is allowed some substantial nourishment. A case of this kind has already been detailed.

Our analytical labours having drawn to a close, we have little to add in the shape of observation. The task of the critic, or rather "analytic," though frequently unpleasant, and always laborious, is useful alike to the individual and the public. The former must pick up a pretty intimate acquaintance with the practice and precepts of his author, and the latter is presented, at a moderate expense, with the gist and the marrow of both. The critic is, in fact, a kind of jack-all to the public, or rather, resembles the minister attached to the despot of old, whose office consisted in chewing his food and rendering it fit for, and easy of digestion! To return to the subject of the present analysis, we think it must be obvious to all who are actually engaged in their profession, how interesting and important a topic it is. The discrepancies of opinion in the minds of the profession, their differences, and, frequently, blunders in treatment, imperiously required a systematic view of the various and complicated injuries of the head, a view which should be practical, founded on experience and illustrated by it. We firmly believe, and we freely avow it, that Mr. Brodie's paper is eminently qualified to answer these desirable ends. Unbiased by theory, untainted by prejudice, the author has detailed the results of his practice—acknowledged his errors where he thought he had committed them—and

tions, in which the breech-pin of a gun was lodged in the anterior lobes of the cerebrum, and extracted at the end of twenty-eight days, the patient afterwards recovering. Here the foreign body remained in the substance of the brain until inflammation had been going on for an entire month, so that the brain and its membranes must have become extensively agglutinated and consolidated around it. The question as to the extraction of a foreign body after such a lapse of time, and under such circumstances, belongs more properly to another part of these inquiries; my observation at present being intended to be confined (as nearly as that can be done) to the treatment to be employed immediately or soon after the occurrence of the injury."

placed upon record a body of *facts*, which must ever be of value to the practical man, although unadorned with the flimsy decorations,

Of florid prose, or honied lies of rhyme.

We had finished this article, and were mightily pleased with the result of our labours, when the following damper was put into our hands.

"Throughout the one hundred pages which are devoted to Mr. Brodie's '*Pathological and Surgical Observations*,' there is not a single line worthy of transcribing. The paper is made up of the most common-place, familiar to the merest tyro, and to be found in every elementary work on surgery." The reviewer accordingly shirks it altogether, and occupies his page with the case of a patient, who sweated so hard, that he flooded the clinical ward of Guy's Hospital! Seriously, was ever such barefaced partiality, such wanton dereliction of literary honesty, on the part of a journal professing to cater for the public instruction? Because an individual is at the head of his profession, and *known* to be hostile to the party which disgraces it, the dagger of malignity is aimed at him and his, whilst any petty lecturer who stoops to curry favour with the vilest of presses, is lauded to the skies with its dirty panegyric. Verily, the labourer is worthy of his hire, a hire which is worse indeed than worthless. The censure of a journal like this is inestimable—its praise to the possessor, a fief of degradation, held by the tenure of the basest apostacy!

P. S. So much for the Review of Mr. Brodie's paper. Let us now see the *sham* analysis of that of Mr. Lawrence. This Analytical Review consists of five short extracts, in *ipsissimis verbis* of Mr. Lawrence, without any intervening connexion by the reviewer, and occupying *four pages and three quarters* of the *Lancet*! Having strung these extracts together, without literary needle or thread, the modest reviewer placidly adds:—"In giving this SUMMARY (!!!) of Mr. Lawrence's paper, we have carefully embraced ALL the leading points; so that our readers may consider themselves in possession of a CONCISE STATEMENT of the talented author's views and practice in erysipelas!" Now as this "concise statement" is in Mr. Lawrence's own words, and occupies less than five pages, we ask Mr. Lawrence how he could impose so heavy a tax on the time and pockets of his professional brethren, as to dilate his paper to the immense extent of 221 octavo pages! The *imposture* and falsehood set forth in this mock review will be apparent to all the better classes of readers; but they will go down quite smoothly with the ignorant apprentices of chemists, druggists, and hedge-accouchers, who form the principal readers of the journal in question.

But even so short an article as the summary of Mr. Lawrence's paper cannot be put forth without a specimen of ignorance and misrepresentation. The *Lancet* is in a rage with Mr. Lawrence for descending into the arena with such insignificant personages as one Henry Earle, and a "Mr. Arnold, Surgeon of the *GRAMPUS*! Whether our readers may have ever heard of Mr. Earle, we cannot pretend to say—but the poor Surgeon of the *Grampus* has little to answer for in this literary contest. The individual alluded to is Mr. ARNOTT, Librarian to the Medico-Chirurgical Society, whose ship, the *Grampus*, rides quietly at her moorings in New Burlington Street.

That we have done literary justice to the production of Mr. Lawrence and Mr. Brodie, uninfluenced by party spirit, the present number of our Journal will amply prove. We can conscientiously say, what every reviewer should be able to say—

Tres Tyriusve mihi nullo discrimine agetur.

Periscope ;

OR,

CIRCUMSPECTIVE REVIEW.

"Ore trahit quodcunque potest, atque addit acervo."

I. LONDON UNIVERSITY—MEDICAL EDUCATION.

Nam vehementer intererat vestra, qui patres estis, liberos vestros hic notissimum discere. Ubi enim aut jucundius morarentur, quam in patria? Aut pudicius continerentur, quam sub oculis parentum? Aut minore sumtu, quam domi?—*Plin. Ep. lib. iv.*

OUR descendants will anxiously inquire the causes that could have prevented the formation of a UNIVERSITY in the metropolis of this great country before the year 1828! They will be astonished to learn these causes—if, indeed, the arguments against a metropolitan university should go down to posterity, which we much doubt. Universal experience is against the arguments in question. How would a Frenchman stare, if he were told that the University of Paris would be much better located at TOURS or MOULINS! How would honest Sawney smile, if any *Southron* assured him that literature, science, and art, would be much better taught and studied at Cromarty or Kilmarnock, than in AULD REEKIE! The proposition is absurd; and we are convinced that no man, unbiassed (we might say, not blinded) by religious or political prejudice, ever undertook the advocacy of such a proposition—save and except the hireling sophist who writes for pay, and not from principle.

But, admitting that divinity, classics, mathematics, and even law, can be more quietly studied on the banks of the CAM than of the THAMES, no one can presume to say that MEDICINE in all its branches, can be taught in the former locality. As it is with this last department of human knowledge that we have to do, so we will leave the advocacy of the new university to the care of other and abler hands, as far as regards literature and science gen-

erally. That the healing art will be greatly benefitted by the new institution, we have not the smallest doubt. English medical education is more defective in classical learning, and the accessory or collateral sciences, than in the purely professional part. This is owing, in a great measure, to the want of a University, where the whole circle of literature and science is under one roof. How is a Borough or Bartholomew student to acquire or improve his classical, mathematical, or other extra-professional knowledge? In the new University, where all the medical will be in contact with the other liberal sciences, the student will have neither excuse nor difficulty in expanding his mind, by the cultivation of the collateral branches of human knowledge. If it be said, that the medical student will learn no more than he is forced to do by the regulations of his college or company, we reply that the "march of intellect," however that term may be ridiculed or abused, will as effectually compel medical men to keep pace with the general progress and diffusion of knowledge, as custom will force them to wear hats instead of turbans on their heads, or shoes instead of sandals on their feet. The youth of other professions and pursuits are rapidly acquiring the elements of general knowledge—and to think that medical practitioners can keep up a proper intercourse with that world to which they are inferior in general acquirements, is to indulge in a dream from which the dreamer will awake too late! It is this liberal or extra-professional education which makes the Oxford and Cambridge graduate hold his head so high—and no man can deny the advantages which it confers. These advantages, too, will, for a time, be enhanced by the privileges annexed to Oxford and Cambridge, in the three learned professions. But if it be

true, and we believe it is, that "knowledge is power," so the actual possession of that knowledge will soon render comparatively valueless the mere seal which indicates the spot where the knowledge is obtained. If Oxford, Cambridge, and other marts of learning have risen and flourished *by degrees*, so will they decay *by degrees*, in obedience to that law which revolves, and for ever will revolve, the wheel of fate—that law which rolled arts, arms, and literature from East to West—from South to North—from Egypt to Greece—from Greece to Italy—and from Italy to the banks of the CAM and the Isis.

Granting that certain honours and privileges be perpetuated to these latter seats of learning, through—

"The boast of heraldry—the pomp of power,"

can it be doubted, for a moment, that a million and a half of people, in this metropolis and its immediate vicinity, rich as they have long been, and thirsty after knowledge, as we hope they will always be, cannot support one UNIVERSITY, at least, as well as Edinburgh, Dublin, Glasgow, Paris, Vienna, Berlin, and twenty other capitals, that have not one fiftieth part of its wealth or spirit? It cannot be—it is not doubted, even by the most bigoted adversaries of liberal education.

And are there no advantages accruing to youth from studying in his own country—under the eye and the roof of his parents—and at a comparatively trifling expense? Ask PLINY, and he will tell you, in the motto which is prefixed to this article. Ask COMMON SENSE, which is superior to the authority of a Pliny, or even a Plato. Ask EXPERIENCE what is the cause of the depravity, vice, intemperance, and the thousand acts of licentiousness, which reign triumphant at the two great seats of learning, in this country? It is the concentrated congregation of youth in two sequestered spots, far from the surveillance of their parents, and with money to spend! What is it but this same concentration which makes, on a small scale, every public seminary for children, a hot-bed of vice? Now we fearlessly maintain that a metropolitan university is infinitely more free from these radical defects than Oxford, Cambridge, or even a public school. The students will be congregated together

only during the hours of tuition. These hours past, they will be dispersed in a thousand different directions, to the houses of their parents or guardians, where they can have no intercourse with their fellow students till the hours of study again commence. No man, whether divine or lawyer, can have such an intimate knowledge of human nature as the medical man. We appeal to him, whether or not we have ample foundation for the above observations and reflections, as far as *moral* circumstances are concerned in the education of youth. We are aware, indeed, that the new university, like all new institutions, will have difficulties to contend with at the beginning—more especially as respects the *clinical* branch of medical instruction. In all other branches, the love of fame alone will attract a host of candidates, of the very first order of talents, and this circumstance will prove a stimulus to each and every medical school in this great metropolis. After the complete organization of this national institution, nothing but *superlative talent* will keep up the private schools of medicine and surgery. And, when a university hospital is established (which will soon be the case) and regular clinical *instruction* (for it hardly deserves that appellation at present) is given—then let the great hospitals of London look out! If the medical officers do not exercise their *heads* as well as their *feet*, they will soon find that the "MARCH OF INTELLECT" is not entirely performed by means of the glutei, vasti, and gastrocnemii muscles. The head, the heart, and the hand, must all co-operate in rendering the wards of hospitals productive of a triple or quadruple crop of advantages—health to the sick, instruction to the pupils, reputation to the clinical teacher—and information to the profession at large.*

* We have made no allusion to the rival university which is to be established still farther West—report says, near St. George's Hospital. We wish it success. It will only render the professors of the primary institution more vigilant and industrious. It is curious, however, that the clerical and aristocratical party which are now setting up a university, declaimed against the necessity, or even the utility of such a seminary! Now it appears that two universities are necessary! So we

In another short article we shall give a sketch of the arrangements in the medical department of the new University, preparatory to its opening in October next.

2. FATAL DISEASE OF THE SPLEEN.

We should not be surprized if future experience determines that the spleen is a more important organ than is generally supposed. There is little doubt, at all events, that its diseases exercise a very baleful influence on the human constitution. The following case is reported in the last volume of the Transactions of the Swedish Society of Medicine, by M. Westman.

An unmarried woman, 28 years of age, was exposed to cold when in a state of perspiration, by which the latter was checked, and afterwards the menses suppressed. These accidents were followed by colicky pains and swelling of the epigastric region. And to these phenomena succeeded a hæmorrhage from all the natural outlets of the body. This hæmorrhage having ceased, it was observed that the spleen was considerably enlarged. A serous effusion into the cavity of the abdomen next ensued—then the menses re-appeared—became again suppressed—and a new hæmorrhage from all outlets of the body took place in so violent a degree as to destroy the life of the patient. On dissection, the liver was found in a state of atrophy, while the spleen was of enormous size, its parenchymatous structure transformed into a grumous glutinous fluid, enveloping three bony concretions, one of which was two inches and a half in length.

How far the disease of the spleen was the cause of the hæmorrhages, it is not easy to say. There can be little doubt, however, that the checked perspiration and suppressed menstruation played a part in the etiology of the splenic affection.

think. We hope to see three or four established before we die. We entirely overlook the little party feelings that are in operation. We contemplate the increased facility for intellectual improvement which must result from these rival institutions.

3. DISTRESSING CASE OF NEURALGIA.

[For Consultation.]

The motives which lead us to publish the following most melaucholy and terrible case will be readily appreciated. It is with the view (would that we could say **HOPE**) of eliciting some suggestion that may tend to mitigate the sufferings of an afflicted member of our own profession.

Mentem mortalia tangunt !

The patient is a surgeon retired from the East India Company's service, and in the 59th year of his age. About nine years ago, a pound of gun-powder (in a cannister) exploded in his left hand, by which the bones of the thumb were fractured, and the soft parts about the palm of the hand much lacerated. The wound was dressed, and the case appeared to be doing well till the 10th day, when the sloughing process took place, which was followed by a profuse hæmorrhage, at first thought to be of venous blood. This was restrained by pressure; but it repeatedly recurred, and proved to be arterial. Several attempts were made to secure the vessel by ligature, but all in vain. Two medical gentlemen (Dr. S. and Mr. C.) advised ligature of the radial artery. The vessel was taken up by the latter gentleman, but unfortunately the radial nerve was included, and, when the ligature was drawn, the patient started up involuntarily from the recumbent to the perpendicular posture, and felt a most dreadful pain dart from the occiput to the forehead. This pain was of short duration, but ever since that time he has been subject to head-ach. The hæmorrhage returned the same day, and Dr. S. in hopes of reaching a sound part of the palmar arch, removed the thumb, at its carpal junction. This operation also failed, and hæmorrhage again returned during the night. Being now much reduced, the patient himself determined on amputation, and the operation was accordingly performed the same night. But new misfortunes seemed destined for the unfortunate patient. While the surgeon was in the act of sawing the bones, the assistant let the soft parts fall into the teeth of the saw. "The pain," says the patient, "at this moment, was most exquisite; that produced by the circular incision was pleasure compared with it.

The sensation was as if melted metal were poured into the wound." One or two more strokes of the saw completed the operation, and the pain ceased. Before the wound healed, two sloughs came away in the direction of the blood-vessels, nearly three inches in length, after which cicatrization proceeded rapidly. But great pain, referred to the lost hand, continued, and the patient felt as if the left hand was still attached, and in a high state of inflammation, with the fingers rigid and immovable. There was also a sense of pain in the region of the cervical vertebrae, with distressing headaches, especially when any acidity prevailed in the stomach. Nevertheless the appetite continued excellent. With the view of getting rid of these painful sensations, the patient visited Edinburgh, London, and Paris, where he consulted the most eminent of the faculty in each capital. The majority of these recommending a second amputation of the arm, as the most effectual means of relief, the operation was performed by Mr. Wardrop, between three and four years ago, in London. His evil fate pursued him from North to South! In about twelve hours after the operation, hæmorrhage took place, and Mr. W. was obliged to open the wound to search for the bleeding vessel. This opening of the stump gave him more pain than all the operations he had previously undergone! The stump, after this, healed very quickly; (the amputation was performed five or six inches above the elbow) but, alas! the original sensation referred to the lost hand remains as intense as ever! Since the last operation, the patient has been gradually losing ground, and, with the exception of a good appetite, he is suffering under all the usual symptoms of dyspepsia. In addition to the pain referred to the absent hand, the patient is harassed with constant spasms in the biceps and other muscles of the arm, and subul-tus. There is also a continual tinnitus in the left ear. He takes a good deal of exercise, but still his sufferings are on the increase. Every thing he eats is disposed to turn acid, and when acidity obtains in the stomach, all the above-mentioned phenomena are greatly exasperated. "I find there is a small hardened portion of substance on the face of the stump, connected with the muscles, very painful on pressure, (the sensation always referred, even then, to the lost hand) and

which appears to me to be a matting of nerves."

Previously to the last (second) amputation, Sir Astley Cooper advised merely the removal of the extremities of the nerves on the face of the stump. Mr. Abernethy was averse to any operation, and recommended blue pill. We have ourselves consulted several eminent surgeons and physicians, but their opinions have been very various. Sir Henry Hallford is of opinion that the extremities of the nerves on the face of the stump are in a state of disease, and are the cause of the patient's sufferings. He recommends another amputation, which he has known to succeed in two instances. We forbear to state any opinion on the subject, at present; but solicit the opinions of others. The patient is employing every means of improving the general health, and especially the state of the digestive organs.

It will be acknowledged that there is hardly to be found on record a more melancholy, unfortunate, or distressing case, than that which is here sketched out. As occurring in the person of one of our own profession, it is doubly interesting, and calculated to call forth our sympathy. Any suggestion communicated to the Editor of this Journal will be conveyed to the afflicted patient.

4. OBSERVATIONS ON DIABETES. By M. HUFELAND.

In a recent number of his journal, M. Hufeland relates a case of this disease cured by opium, and then appends some comments. The case was as follows:—A man previously robust, became at the age of 45, affected with diabetes mellitus, without any other assignable cause than frequent applications of cold to the surface of the body. Various remedies were tried in vain. He was then put upon a course of opium, combined with ammonia, which he continued from May till September, by which period he was completely cured.

The narration of this case gives M. Hufeland an opportunity of enunciating his ideas respecting the nature of dia-

betes. His doctrine is simply this: that the proximate cause of the disease consists "in a pathological change in the secretory action of the kidneys—the effect of which change is to substitute sugar for the constituent principles of the urine—and to deprive the blood of the saccharine nutriment." We are disposed to agree with a French critic, who remarks that "this explanation, which is no explanation at all, advances us very little in the knowledge of the disease, pathological or therapeutical." The same critic makes the following remarks:—"Diabetes being a chronic disease, its remote causes may be included in the following category:—debility of the kidneys—nervous super-excitation of the spinal marrow and renal plexus—sanguineous congestion—chronic inflammation—abdominal irritation—metastasis and local disorganization. These different causes require different methods of treatment—and hence we may explain the success, and the want of success, which have attended particular remedies and modes of practice." Vous avez raison monsieur!

5. SUDDEN SENSE OF SUFFOCATION.

There are many affections—they may only be *symptoms*—for which we can find no appropriate designations in systems of nosology, but which nevertheless occasion great anxiety to the mind of the practitioner—great danger to the patient. Among these may be mentioned a sense of sudden suffocation which comes on people, generally when in bed, without there being evidence of any organic or other disease in the heart or lungs. Thus, we are acquainted with an elderly gentleman, who has long been a martyr to gout, and on whose joints are numerous chalk-stones. His heart and lungs present no appearance of disease, as far as these functions are concerned, or as auscultation and percussion can determine. At uncertain periods, and usually in the night, he is seized with such a sense of suffocation, that his life appears, and we believe is, in the greatest jeopardy. The loss of four or five ounces of blood gives instant and entire relief from this terrible state of strangulation. In the intervals

his breathing and circulation are free. He has taken Wilson's tincture for the gout during the last ten years. When no person is at hand to open a vein, this gentleman has a long and desperate struggle with the spasm, and derives little relief from any medicine till blood can be drawn. This case was brought to our recollection by the perusal of one published by the younger Dr. Lacheze, Professor of Medicine at Angers.

Case. On the 20th February, at eight o'clock in the evening, Madam ———, being in the midst of her family, and having no previous symptom of disorder, felt, all at once, such a sense of suffocation that she could scarcely get in the smallest quantity of air into the lungs. In twenty minutes from the commencement of the attack, Professor Lacheze was with the patient, and found her in the following condition:—extreme agitation—dreadful dyspnoea—countenance somewhat flushed, and indicative of great distress—the inspirations at long intervals—pulse concentrated and a little accelerated—occasional paroxysms of cough, without expectoration—the patient thought her whole complaint was in the left side of the chest. As the lady appeared on the very brink of the grave, Dr. L. instantly opened a vein, and the blood had scarcely begun to flow, when relief was obtained. She said that she felt as if a load of one hundred pounds was taken off her chest. Only eight or ten ounces were taken away, and the patient was quite well. Two years previously she had experienced a similar attack, and was relieved by similar means.—BIBLIOTHEQUE MED.

As these paroxysms are not unfrequently connected with a gouty diathesis, if not dependent on a gouty cause, no more blood should be taken than is just sufficient to relieve the symptoms; otherwise the malady may be rendered worse instead of better by the depletion. These sudden attacks, we conceive, are not to be classed under the head of asthma. They come in an instant—they are as quickly removed—and the remedies are not the same.

6. TRUE PHILOSOPHY—OPPOSITION.

At a dinner given by the Phrenological Society of Edinburgh to Dr. Spurzheim, on the 25th January last, there was some excellent speaking; and, among the *appropriate* toasts usual at all public dinners, we perceive *one*, given by Mr. Scott, which deserves commemoration, as marking the progress of liberality and true philosophy in a very striking manner. It was received with rapturous applause, and drunk with "three times three." It was—"THE OPPONENTS OF PHRENOLOGY!" When one of Shakespeare's clowns was asked "how he did?"—his answer was, "*the better for my foes, and the worse for my friends.*" So, we are convinced, will it be generally found in this world. From friends comes FLATTERY, the most dangerous as well as the most delicious unction that can be laid to the soul! They praise us for qualities which perhaps we do not possess—or magnify those virtues or acquirements which we have. At all events, we may be assured that, next to a good friend, is the advantage of having a stanch enemy—one who deals not in soft blows and petty skirmishes, but one who enters the field in earnest, and warns you that he will *take* all advantages, and *give* no quarter. This is the enemy which we prefer. We quite agree with Mr. Scott, that—"opposition generally is a good thing, and is the means of producing good in every case where it is duly applied. It stirs up the languid faculties, and rouses them to exertions which they would not otherwise make. No science, art, invention, or discovery of any kind, has ever been perfected, without first running the gauntlet of a hot and determined opposition." The good effects of opposition indeed are seen in every thing, from the national councils down to rival green-grocers. In literature and science—even in medical science, opposition is the soul of industry, the patron of talent, the sun that draws forth the flowers of genius. It is on this account, that we rejoice at the prospect of two universities in this metropolis. The one will be a constant whetstone to the other. Had it not been for the first, the second would never have sprung into existence—and if no *second* had come forth, the professors of the *first* would have laboured under the greatest of all misfortunes—the want of an opponent. For our own parts, we are, or ought to be, more

than usually grateful to Fortune; for Heaven has blessed us with a preternatural lot of bitter enemies—the best friends we ever had. May they live long and multiply fast!

7. CURIOUS INSTANCES OF PARTIAL AGUE.

However strangely the above title may sound in some people's ears, we have no doubt that the causes which produce intermittent and remittent fevers will sometimes—nay, very often, act on a single region, or even a single spot of the body, and there induce a train of symptoms which are little suspected of aguish character. When we have stated the following facts, these opinions will not seem so chimerical.

Madame B——, aged 22 years, and previously healthy, was suckling her infant at the time that the following attack came on without any known cause. She was seized with a cold chill, which was succeeded by heat and cephalalgia of one side of the head and face, being exactly the left half of these parts. After a few hours' duration, these symptoms disappeared in a perspiration of the parts above-mentioned, and of those only. The next day, and at the same hour, another and a similar attack took place, and was much more severe. The paroxysms terminated by perspiration as before, and after an equal duration. A physician, Dr. Lassalvy, was witness of the third paroxysm. After a rigor, which commenced in the back, and radiated to the upper and lower extremities of the left side, lasting a quarter of an hour, a re-action took place in the same side, with cephalalgia, flushing of the left cheek, glistening of that eye, lachrymation, pain of the scalp on pressure, and slight convulsive movements of the left eye-lid and side of the upper lip, redness and dryness of one side of the tongue. The face now presented a very curious spectacle—red, tense, and shining on the left side, while the right was perfectly natural. Both sides of the chest sounded well; but in the left side, the "*râle crepitant*" was distinctly heard, without cough or expectoration. The left side of the epigastrium

and of the abdomen was painful on pressure. The attack commenced at 8 o'clock and increased till 10, when it began to diminish, and finally disappeared in a perspiration on the side affected. The sulphate of quinine was administered—the fourth accession was mitigated, and the whole of the phenomena soon disappeared.

Cases analogous to the above may be found in many authors. M. Duval states (*Obs. Med. Chémic.*) the case of a soldier in the Military Hospital of Brussels, who was affected with a quartan ague, presenting the following anomaly. The cold fit, which generally lasted two hours, was accompanied by violent muscular spasms of one side of the body, which gave the face a most hideous appearance. What was still more remarkable, too, the right and left sides were alternately affected in each succeeding paroxysm.

In the *REVUE MEDICALE* for 1814, we have the case of a man who slept in a room newly painted, and who was seized with an intermittent fever, which only affected that side which was next the painted wall of the room where he lay. Mangold (Erfurt, 1766) relates an instance of quartan ague, accompanied by hemiplegia, perspiration, and convulsions, sometimes in the right, sometimes in left half of the body; but never in both at the same time. M. D'Auxeron (*Journ. de Med.* t. xxiv.) details a case where ague affected the lower half of the body only—from the diaphragm downwards. VANSWIETEN has recorded a case of *calalepsy* affecting only one side of the body. Morgagni instances a case where icterus was confined to one side—that side being paralytic. He states that the boundary between the jaundiced and unjaundiced sides were remarkably distinct, the two sides of the face, and even of the nose, presenting a most singular contrast. Et-muller, Paulinus, Plenck, and others, have put similar cases on record.—*JOURNAL DE PROGRES*, Vol. VIII. 1828.

We have dwelt the longer on these facts, because diseases of an aguish character, that is, of malarious origin, are now extremely prevalent throughout England, assuming every form of Proteus, every colour of the rainbow—and imitating half the diseases in the most complicated systems of pathology. The facts

and arguments which we have brought forward from Dr. Macculloch's work, will receive, we strongly suspect, a great accession of strength from the "atmospheric constitution," as Sydenham would call it, now prevailing over these islands, and indeed over the Continent generally. Were we inclined to speculate, we would hazard an opinion that the epidemic cholera of India, which, after making various circuits in that extensive quarter of the globe, began to travel westward, and actually reached the borders of the Black Sea, is now actually in Europe—not indeed in its frightful oriental attire—but under a variety of masked forms, that are chiefly characterised and detected by one general feature of periodicity, intermission, or remission. The *detection*, however, requires a minuter examination than most practitioners, in the hurry of business, are inclined to bestow on what are considered as only modifications or anomalies of the common diseases of the time and place. It is on this account that we entreat them to direct their attention to the prevailing disorders of the present period, being well convinced that they will soon perceive a very peculiar character in the majority of those that are thus narrowly investigated.

8. NEW METHOD OF ACCELERATING THE SEPARATION OF THE PLACENTA FROM THE UTERUS. By Dr. DUPARQUE.

We have, on a former occasion, made our readers acquainted with Professor Mojon's proposal and practice of arresting uterine hæmorrhage, by injection of cold water into the vessels of the placenta—and also his proposal of injecting solution of chloride of lime, through the same channel, in cases of retention of the secundines, in order to destroy the putrid miasms generated by the corrupting mass. Taking a hint from these proposals, Dr. Duparque has put into practice, in two cases, the injection of cold water through the channel of the umbilical veins, in order to induce uterine contraction in cases of retained placenta. In both instances, the patients complained of pain in the loins, as soon as the injection reached the placenta, and strong uterine contraction was the immediate consequence, with separation and ejection of

the placenta. The injection is easily performed by means of a common syringe—the practice cannot be attended with the slightest danger—and it may, perhaps, be preferable to much traction by the cord, or the forcible introduction of the hand.—**BIBLIOT. MED.**

9. MELANCHOLY INSTANCE OF GRADUAL ABOLITION OF ALL THE SENSES IN SUCCESSION, THE INTELLECTUAL FACULTIES REMAINING ENTIRE.

Those who are accustomed to visit the asylums of the insane, not unfrequently witness that dreadful death by piecemeal, which is preceded, if not occasioned, by a gradual and successive abolition of all the senses by which we communicate with the world around us. Fortunately, in all these cases, or almost all, the intellectual faculties have previously become so deranged, that the loss of the external senses is little, if at all, felt. Not so in the following instance, where proud man might be almost said to be cursed with reason, and with consciousness, alas ! too keen, of his living death !

Case. The patient was evidently a man of some rank and consequence during the reign of Napoleon ; and held an important post in the financial department of the government. He was a man of wit—a lover of the fine arts, and a devotee of pleasure, which had been abused. All at once he became affected with gutta serena, and was left, like Milton, in total darkness. Having suffered in his youth from syphilis, he was put on a course of mercury, without any benefit. Afterwards he tried numerous remedies, under the best physicians in France, but to no purpose. Notwithstanding this blindness, he continued to fulfil his functions as financier, and acquired such a tact that he could distinguish engravings on copper from woodcuts, lithographs, &c. by the fingers alone. In short, he enjoyed society nearly as much as ever, and hardly felt the loss of sight. But in a few years he began to grow deaf of one ear—then of the other, and in a short time, he had to add the total loss of hearing to that of sight ! By means of large moveable types or letters, which

his family put together, he was soon able to read with his fingers whatever was wished to be communicated, and by this contrivance he still held free intercourse with the external world. All his intellectual faculties remained unimpaired, and his memory was extremely tenacious. But new misfortunes were in store. Muscular motion and sensibility began to fail, and, in a short time, they were completely extinct ! He was now, as it were, exiled from the earth in the midst of his family and friends ! He could speak ; but no answer, no sign, no impression could he receive through any channel of sense ! In this deplorable condition it was accidentally discovered that a small portion of one of his cheeks retained its sensibility, and the active imagination of the sufferer soon took advantage of the discovery. He caused one of his sons to trace letters on his cheeks as he dictated them, and by constant repetition he was soon able to recognize these letters as traced on the sensible part. He made such progress that in a few days, his son wrote on his father's cheek the speech of the King of France on his return in 1815, the whole of which was completely understood ! With this sole solace of a dreary death in life, he dragged out some time, in a state of the greatest misery that can well be imagined—his intellectual faculties not appearing to suffer the slightest degree of decay. At length the *involuntary* muscles, or those of the organic life, began to partake of the general paralysis of the locomotive muscles—and vitality at last ebbed and finally disappeared !

The above case, which is published by M. Defermon, affords a remarkable example of abolition of function in all those portions of brain to which the nerves of sense and of motion lead, without any affection of those other portions in which the intellectual faculties reside, or through which they are manifested ! The case offers food for profound reflection.

10. FATAL ICTERUS.

When jaundice continues for any length of time, without the common symptoms of gall-stones, we generally suspect some change of structure in the liver it-

self—or some tumour pressing on the ducts. The following case is interesting in several points of view.

A man 56 years of age, became affected with jaundice, which lasted several months, when he died. No accurate history, however, of the symptoms could be obtained, but the body was very accurately examined in the Civil Hospital of Nancy, and this was the report. Almost all the interior parts, solids and fluids, were tinged yellow, and, on chemical examination, they exhibited proofs of bile. The pylorus was sound. Two or three inches from the origin of the duodenum, there was a tumour with elevated edges, rather larger than a crown-piece, the surface of which was uneven, very hard to the touch, of a whitish yellow colour, and very vascular. The different coats of the intestines were involved in the disease, which included, at one of its edges, the openings of the biliary and pancreatic ducts, which were extremely contracted, and almost annihilated. When this tumour was incised, it was found to be about half an inch in thickness—hard, and, in short complete scirrhus. The liver was larger and heavier than natural, and of a brownish red colour. The gall-bladder was extremely distended, and when strongly pressed, a few drops of bile issued forth into the duodenum. All the three ducts, cystic, hepatic, and common, were enormously dilated—so that two fingers could be introduced into the ductus communis, when cut across. The fluid in the liver and ducts had little resemblance to healthy bile.—*JOURNAL DE PROGRES.*

It would have been very interesting to have had a history of the symptoms in this case, since it was one where death, in all probability, was caused by the absence of bile in the alimentary canal, and its presence in all the other parts of the body. It can hardly be supposed that death was caused by the scirrhus tumour in the duodenum, as it had not come to a state of open cancer, and was not so situated as to interfere materially with any other function than that of the liver.

11. DREADFUL INSTANCE OF INFANTICIDAL MONOMANIA.

In a small town near Copenhagen, a horrible case of the above has recently occurred, the particulars of which are published by Dr. Otto, in the last (17th) number of the *PHRENOLOGICAL JOURNAL*. The unhappy criminal (if such a monomaniac can be termed) is a Peter Nielsen, aged 47 years, the father of seven children, of which he drowned, at one time, four! He appears to have experienced some misfortunes, but was not in positive want of the necessities of life at the moment when he committed the horrid deed. It is evident, from the testimony of several witnesses, who conversed with him, both before and after the transaction, that he was not intoxicated, nor in the least agitation of mind. He was, on the contrary, placid and tranquil. No domestic altercations, of any moment, had occurred—but he was disconcerted at not readily getting a new lodging on being turned out of that which he previously inhabited. In short, no external or obvious motive to this terrible act of infanticide could be traced. He evinced no disposition to melancholy, "nor had he read any mischievous books." His love to his children was testified by all his acquaintance. He confessed that the idea of killing his children came into his head on the morning of the day that he put the idea into execution—and that the impulse was quite irresistible. He determined to drown the three younger boys, and to spare the daughter, who was older. But the unfortunate girl insisted on accompanying her father and brothers in the walk which he proposed, and though he endeavoured to persuade her to return, she would not. He averred that his motive for destroying the children was the fear of not being able to maintain them. He wished to spare the girl—not because he loved her more, but because she had made more progress, and was better able to provide for herself. Having arrived at a pond, he first embraced his children, and then hurled them all into the water! He stood by unmoved, and saw them struggle and sink! He then returned quietly to the town, and there disclosed the whole affair. He was conducted back to the pond, and saw the dead bodies of his children, without

evincing any emotion of mind. For a moment he wept, when he saw the bodies opened, (for the purpose of medico-legal proof of the kind of death,) but soon regained his tranquillity. He affirmed that he did not destroy his offspring in order to procure happiness for them in Heaven, nor from any desire to be put to death himself, as he wished to live.

We think every enlightened mind will view this case as one of monomania. Some ungovernable impulse, without rational purpose,—some hallucination of reason, must have urged him to the unnatural act. We agree with Dr. Otto, that this infanticidal impulse by no means proves that the parent was originally or naturally deficient in the love of his offspring. "Every faculty, even the strongest, may be overwhelmed and overcome by a strong passion—or insanity in another faculty." How many honest and moral men do we see, in the hour of temptation, yield to this or that passion? Dr. Otto endeavours to account for the physical cause of this monomania, by supposing that a temporary congestion of blood, or excitement, takes place in a portion of the brain, for instance, in the organ of DESTRUCTIVENESS—thus causing an involuntary or invincible propensity to kill. In whatever way we account for the cause, we are convinced that monomania existed at the time when this infanticide was committed, and that the verdict should be accordingly.

12. A CASE ILLUSTRATIVE OF THE EFFECTS OF A DIVISION OF THE SPINAL MARROW BETWEEN THE THIRD AND FOURTH DORSAL VERTIBRE, IN THE HUMAN SUBJECT, WITH REMARKS. BY WILLIAM WALLACE, M R. I. A., &c.

[Dublin Transactions, Vol. V.]

A man-servant, aged 44, fell from a drawing room window into the area, on the 11th Decr. 1826. Mr. Wallace found him supported on a chair, and crying lamentably on account of violent pain in his back. His countenance was pale and anxious—surface cold—eyelids closed—pupils dilated—pulse small and weak. This was in 15 minutes after the fall. He was removed to bed, and seemed to have no muscular power, or conscious-

ness. An obscure crepitus was felt among the spinous processes between the scapulæ—and pressure there seemed to occasion intolerable pain. There was no external mark of violence on the back. He could not or would not answer questions—but continued to cry out with pain. He was conveyed cautiously to the Jervis-street Infirmary, and at 8 in the evening Mr. W. again visited him. He was now comparatively tranquil—pulse small and weak—respiration scarcely audible—appeared stupid and inattentive; but, when roused, he answered questions distinctly. Still complained of great pain in his back, between the scapulæ—had no sense or motion of the lower half of the body. The catheter was introduced, and the urine drawn off, and directions were given to watch the approach of re-action, and then to bleed.

12th. The re action took place at 11 o'clock last night, when twelve ounces of blood were abstracted, and an enema thrown up, which returned without any fæces. He spent a restless night, with sickness of stomach, and now appeared in great agony—pulse above 100, and bounding—breathing quick and oppressed—great irritability of stomach—abdomen full and tense—no discharge of urine or fæces, except what of the former had been drawn off yesterday by the catheter. "No sensibility or motility from the seventh vertebro-sternal rib downwards." The line of demarcation between the sensible and insensible parts was very accurately defined. The water drawn off was ammoniacal—8 ounces of blood were taken from the arm—purgatives ordered, but were quickly rejected from the stomach, the enema returning without effect. Nothing would tranquilize the stomach. 13th. Continues much the same—nothing will lie on the stomach—no evacuation from the bowels. There was no sense of nausea attending the vomiting.

Some tartrate of antimony was dissolved in a large quantity of whey—a grain to the pint—and he was desired to drink freely of the solution. He was not, however, expected to live through the night. 14th. To Mr. Wallace's astonishment, the patient was much better this morning. His countenance was revived—vomiting and hiccup had ceased—abdomen softer and much less full—thirst

unabated—tongue white and dry—pulse slower and fuller. He had a sleep in the night, after which, the bowels had acted freely. He had taken 4 grains of the tartrate, in the course of the night, in four pints of whey. This last was ordered to be continued for common drink, with the same proportion of tartrate as before. 15th. Took 4 pints of the emetic whey during the last 24 hours—no sickness—bowels open. Complains much of palpitation of the heart, with soreness of the chest, and inability to cough. In the evening of this day, the patient seemed very much better than at any period since the accident occurred. The thirst was trifling, the tongue cleaning, the pulse decreasing in frequency, the abdomen softer, the respiration natural, countenance tranquil,—in short, all the symptoms improved—but still the paralysis of the lower part of the body remaining.

16th. This morning there was an alarming change for the worse. He lingered out, however, till the 19th; that is, till the 9th day of the accident, when he expired, with most of the symptoms of typhoid fever.

Dissection nine hours after death. The muscles were universally rigid. By means of a small saw the spinous processes of the vertebræ were separated from the transverse processes, and removed, so as to expose the vertebral canal and its contents.

"The spinous processes of the second, third, and fourth dorsal vertebræ were fractured at their root. The ligamenta subflava and interspinalia belonging to the fifth and sixth vertebræ were torn. A large quantity of dark blood was effused into the spinal canal, round the theca vertebralis, insulating the latter from the former, and extending from the upper to the lower end of the spine. The theca vertebralis was lacerated on its dorsal aspect to the extent of three-eighths of an inch, opposite to the third vertebra of the back.

"The spinal marrow, with its proper membranes, was torn across at that part where it corresponds to the interval between the third and fourth dorsal vertebræ. Its lacerated ends were separated to the extent of half an inch, and the interval filled with blood.

"The vaginal ligament was lacerated

at the interval between the third and fourth dorsal vertebræ, and blood was effused between the posterior surfaces of the bodies of the vertebræ and this ligament. The intervertebral substance, which corresponded to the rupture in the vaginal ligament, was torn from the vertebra above. The spine, viewed from the thorax, did not present any marks of injury." 213.

The vessels of the head were very much congested, and a thin stratum of effused blood covered the posterior, the superior, and the external surfaces of the posterior lobes of the brain. This effusion was between the pia mater and the surface of the brain, and was extremely thin, like the impression of a camel's hair pencil charged with blood. The substance of the brain was firm, and there was a small quantity of serum in the ventricles. The internal surface of the stomach was very vascular and much of the small intestines was nearly black, with extensive intussusceptions. The liver was firm—the gall-bladder contained a very small quantity of viscid fluid, resembling the white of an egg. The whole system of the vena portæ was greatly distended with very black blood. The veins on the outer and inner surface of the pleura were minutely injected with dark coloured blood, so as to form a beautiful vascular net-work, rendering the membrane nearly black. The surfaces of the pleura were glued together by a very thin stratum of adhesive matter. The lungs were firm, and filled the cavity of the chest. They were of a dark colour, and gorged with black blood. The cavities of the pleura contained a few ounces of dark serous fluid. There were three ounces of yellow serum in the pericardium. The heart was large, and distended by black blood, partly coagulated.

Remarks. The observation of Nysten is confirmed by this case—namely, that division of the spinal marrow does not prevent or diminish that rigidity of the muscular system, which is, perhaps, the result of its last vital action. The phenomena presented on dissection render it probable that the blood did not undergo the proper change in the lungs, and that there was an undue accumulation of blood in the right side of the heart thereby

occasioned. Serous effusions were the natural results. There is reason to infer, that the biliary secretion was suspended. The ammoniacal state of the urine is the usual consequence of the spinal accident; and inflammation of the bladder is often the cause of death. We may here remark, that in cases of paraplegia from spinal injury, the introduction of the catheter is frequently productive of great mischief. The parts are insensible; and the inexperienced house-surgeon (when the patient is in hospital) works away, and thinks he is doing no harm while the patient does not complain. The effects appear, sooner or later, in the shape of inflammation or sloughing of the urinary passages. Mr. Bell has noticed this among many other excellent observations of that talented surgeon.

"Was the discharge from the bowels on the fourth day the result of the action of the tartar emetic, or was it the consequence of the injury of the spinal marrow? When a bladder has been paralyzed from injury of its nerves, retention of urine is the immediate result, but sooner or later this is followed by incontinence, as was the case in the present instance. This phenomenon is to be explained by a law to which the action of

nerves appears to be subject, viz. one degree of pressure or irritation will produce spasm or convulsion, and a greater degree of the same will cause loss of power, or paralysis. This law will be found to govern the muscular system of both voluntary and involuntary action, and consequently the sphincters." 219.

It need not excite surprise, in this period of surgical science, that the patient should have lived so long after complete division of the spinal marrow. Independent of Magendie's celebrated case, where a considerable portion of spinal marrow was found obliterated, and yet where sensation and motion in the lower extremities remained, we believe that Mr. Bell met with a case of complete division of the "spinal brain," and where the patient lived nearly a year;—and died, at last, of some eruptive disease—and not at all of the spinal injury. It is more than probable, that had Mr. Bell's patient not died of another disease, a considerable degree of sensation and motion would have returned—by a kind of collateral circulation of the nervous energy, in the same way that the circulation of the blood is carried on by circuitous routes, when the regular channel is blocked up.

HOSPITAL PRACTICE.

ST. GEORGE'S HOSPITAL.

13. INJURIES OF THE HEAD.

Sir Astley Cooper was the first to draw a distinction between simple and compound fracture of the skull, a distinction on which is hinged a very material difference of treatment. It has been argued, that this distinction is imaginary, and that there is no analogy whatever between fractures of the cranium and fractures of the long bones. The objection is more specious than solid. If there be a compound fracture of the femur, will any one be so bold as to affirm, that the danger which ensues is merely dependent on the injury of the *bone*? Does the patient die of caries of the *bone*, of necrosis, or exfoliation, or rather, when he sinks, is it not by reason of the mischief to the soft parts, the blood-vessels, the nerves, the muscles, or the tendons?

Are the wasting suppurations which so frequently destroy him, in the bone or the parts around? Most undoubtedly the latter; though, of course, they are aggravated by the injured condition of the former.

In fractures of the cranium, the mischief is not in the parts without, but those within—the meninges, or the brain itself. The membranes of the brain are serous membranes, and extremely prone to inflammation, whilst they are as carefully excluded by nature from the contact of the air, as the parts around the femur, the tibia, or any bone whatever. The same thing holds with the brain itself, and yet there are some who deny that it can make the slightest difference, in fractures of the cranium, whether the membranes or the brain are exposed to the atmospheric influence or not.

We contend, then, that there is a very close analogy between fracture of bones in general, and fracture of the cranium, the danger of both materially depending upon the injury inflicted on, or the inflammation aroused in, the textures in the neighbourhood. In fracture of the long bones, the mischief is done to the parts *around*, in fracture of the cranium, to those *within*, and that is all the difference. There are, however, certain bones, or sets of bones, in which even the above inconsiderable distinction, we can scarcely call it difference, does not exist. We allude to the ribs and the bones of the pelvis; the danger of a broken rib, as every body knows, arising from inflammation of the pleura, which danger is of course increased by the fracture being compound. We might continue to argue on the subject until we wearied ourselves and our readers, but we hope we have said enough to shew, that the distinction which was drawn by Sir Astley Cooper, between simple and compound fractures of the skull is neither void of analogy, nor unfounded in principle. We shall now detail a case of compound fracture of the skull, in which the trephine was had recourse to, and the patient never had a "symptom."

Case. William Middleton, æt. 40, was admitted, May 30th, 1828. at 1, A. M. under the care of Mr. Brodie.

He was crossing a field between 8 and 9 o'clock the previous evening, when he witnessed a row between some Irishmen and a blacksmith. He and his companions began to mediate between the parties, when the Irishmen turned upon the peace-maker, and felled him to the ground by a blow with an axe upon the head. He was stunned for upwards of an hour, and, on recovering his senses, he found that both friends and foes had very valiantly made off, and left him master of the *field*, or, at least, lying on it! The wound was bleeding furiously, and after a little while he was carried to a public-house and seen by a practitioner. At midnight, he was brought to St. George's Hospital, and before his arrival the hæmorrhage had ceased.

When admitted, he was perfectly sensible, though weak—no stertor—no paralysis—pupils natural. Three scalp-wounds were discovered, one upon the

right side near the ear, another on the opposite side, a little above the temporal ridge of the parietal bone, and the largest of all at the vertex, a little to the right of, and crossing obliquely over the sagittal suture. It was a clean cut, like what would be inflicted by an axe, the bone was depressed and driven apparently into the longitudinal sinus, and the finger could be passed in for half an inch, but touched neither brain nor *dura mater*. The other wounds were superficial—the lower jaw was broken.

He was ordered a purgative of calomel and jalap, and continued without any untoward symptoms throughout the day. At 10, P. M. Mr. Brodie saw him for the first time, and although no symptoms had appeared, applied the trephine and removed the pieces of depressed bone. The inner table was more extensively broken than the outer, causing some little difficulty in its elevation. The edges of the wound were brought together with a suture, and lightly dressed.

He complained of a little pain in the head after the operation, but it soon went off, and he passed a quiet night. In the afternoon of the succeeding day, he had some shivering and nausea, with a quick pulse, and whitish tongue. These symptoms subsided in the evening, but considerable purging came on during the night. He was bled at 6, P. M. to twelve or fourteen ounces, and a spirit lotion put upon the head. The purging in a day or two subsided of itself, and indeed on the 3d of June it was necessary to order calomel and senna draught to procure a stool. No bad symptoms whatever supervened, the wound in the scalp granulated kindly, and the patient will shortly be dismissed the Hospital.

In this case there cannot be a doubt that the longitudinal sinus was extensively opened into, notwithstanding which, the bleeding was comparatively trifling. The absence of symptoms from the first would lead one to imagine, that the depressed bone had been forced into the sinus, but had not injured the *dura mater*, and membranes immediately covering the brain. Whether inflammation of the membranes would have come on if those bones had not been raised at all, can of course, be only matter of conjecture, but the probabilities are surely more in favour of its occurrence, when

apiculæ of bone are in contact with and irritate the dura mater, than when they are elevated and removed.

In an interesting clinical lecture delivered on the case by Mr. Brodie, he remarked, that it not unfrequently happens, in fractures with depression, that supuration takes place between the bone and the dura mater, and if the collected pus has not a ready exit, inflammation ensues in the deeper-seated membranes, opposite the point where the matter is pent up. Mr. Brodie agreed, in the main, with Sir Astley Cooper, on the propriety of a distinction between simple and compound fractures of the cranium, and observed that he had many cases, some of which he had seen himself, and others he had collected from various sources, which went to establish the position of Sir Astley. There is, in fact, said Mr. B. a considerably greater danger of supuration between the bone and the dura mater when the scalp is wounded, than when it is entire. On this account, as well as to give a readier egress to the pus, if it should collect, Mr. Brodie had recourse to the trephine. Mr. Brodie gave an additional reason for the operation, viz. that when the broken bone is allowed to remain depressed, the patient may recover in the first instance, but be affected at last with a series of anomalous symptoms, as convulsions, paralysis, or numbness, when he returns to his usual avocations and habits of life. If the scalp be wounded and bone depressed, but a considerable interval remain between the broken fragments, Mr. Brodie does not consider the operation so decidedly called for, as the pus, if it forms upon the dura mater, is already provided with the means of escape. In confirmation of this remark, Mr. B. alluded to the case of a boy, who was admitted with symptoms very similar to those in the present instance. The trephine was not applied, but in the course of several days feverishness and unpleasant symptoms supervened. The wound had partially united, preventing the matter from escaping freely; the scalp was divided, the collected pus let out, and the patient did extremely well.

In the above case, the bone was fractured and depressed, but in the one we are going to relate it was merely denuded, though there were reasons for supposing, at the time, that more or less extravasation had taken place within the cranium.

Case 2. John Antcliff, ætatis 37, was brought into St. George's Hospital, on the 2d of June, at 3 p. m. having fallen from a hay-loft, twenty feet in height.

He was perfectly insensible, muttering some indistinct exclamation when loudly halloo'd to, but evidently incapable of understanding what was said. The pulse was soft and slow, the surface cool, the whole frame relaxed, the pupils fixedly dilated. Over the left ear, there was a considerable scalp-wound, exposing a portion of the parietal bone, and there were several bruises on other parts. There was reason to suspect that the patient was in liquor. In the evening some re-action had appeared, and on the 3d, though drowsy, he was sensible when roused; the pulse was 86, labouring and hard.—*Hausius sennæ.*—*V. S. ad 3 xij*—*Saline with salts and antimonial wine every four hours.*

The bleeding was repeated in the evening, and again upon the 4th, when he appeared to be in a very precarious condition. He was lethargic, and incapable of being properly aroused; scarcely comprehended any question put to him, or muttered an incoherent answer, and was extremely restless, constantly arising out of bed and tumbling the bed-clothes. The bowels were purged, the pupils dilated, the wound puffy, and there was œdema of the scalp around. On the 5th the symptoms were in some degree relieved, but he was, at times, delirious, and had passed an unquiet night.—*Cat. lini capiti raso.*

6th. Worse than yesterday, and was quite delirious in the night. He sits in a moping moody state, scarcely answering a question, and that in a low desponding tone; pupils dilated; pulse small and low; pain in the head, especially in the situation of the wound, which is very sloughy.—*V. S. ad 3 x.*

He had a comfortable night and was better on the 7th. On the 8th the pupils acted freely, the head-ach gradually subsided, and on the 14th he left the hospital, though against the wish of Mr. Brodie, who thought it extremely probable that he would soon return with a re-appearance of the symptoms. This

prognosis was prophetic, for on the 19th, the man was re-admitted, with head-ach and giddiness; countenance dull and sodden; pulse full and hard; tongue brown. He was purged and bled to ten or twelve ounces, and the head-ach and giddiness disappeared in a day or two. At present he is doing well.

Mr. Brodie was inclined to believe, from the obstinacy and severity of the symptoms, that a slight extravasation had occurred within the head. At one time, indeed, Mr. B. thought it not improbable that matter might form on the surface of the dura mater, opposite the point where the bone was denuded, and require the application of the trephine. Fortunately this was not the case, or the chances of recovery would have been but slight, as the following account will prove.

Case 3. A man of good constitution, and about thirty-six years of age, received a blow upon the head, from the stool on which he was sitting being overturned. A scalp-wound was the consequence, by which the cranium was denuded at its upper part, but not a symptom either of concussion or compression in the first instant supervened. The inflammation in the scalp was treated by the proper remedies, but at the expiration of a week or ten days, the patient was seized with shivering, vomiting, and a fever which was considered intermittent, and treated, we need scarcely say without success, by the sulphate of quinine. The symptoms went on, and in the course of a few days he was suddenly attacked with hemiplegia of the left side, and carried to the Hôtel Dieu.

The paralysis, the stupor without total loss of sense, the history of the accident, and the progress of the symptoms, led M. Sanson and M. Dupuytren to conclude that pus was effused either in the brain, or on the surface of the dura mater. There was neither fracture nor depression of the cranium, and had there been extravasation, there would have been some symptoms of its presence from the first. Believing, then, that the exposure and denudation of the bone had caused inflammation and separation of the dura mater, with effusion of pus either above it or below it, the trephine was applied over the denuded part by M. Sanson, with the entire concurrence of his colleague.

Before the whole circle of bone embraced in the trephine was got away, a drop or two of pus was seen oozing up beside its margin, and at length, when the bone was removed, the dura mater was perceived to be covered with a purulent exudation, which adhered very firmly to its surface. The dura mater itself was glistening, and not at all thrown upwards, or raised above its natural level, as it would be if pus were collected in any considerable quantity beneath it. This being the case, no incision was made into the membrane, but the operation was concluded, and the patient sent to bed. After the man was removed from the theatre, M. Dupuytren remarked that the chances of success were extremely slight, as the dura mater, in all probability was detached from the cranium to a considerable extent, whilst the firmness of the purulent effusion on its surface would effectually prevent its escape by the opening made by the trepan. The tension, without any elevation, of the dura mater prevented the idea of a purulent dépôt being placed beneath, but if relief was not obtained, the surgeon might make an incision into the membrane in the evening, without adding materially to the danger of the patient. In M. Dupuytren's opinion, the contact of the external air with the membranes of the brain must exercise a deleterious influence, increase the inflammation, and constitute, in fact, the most frequent cause of the want of success which attends the operation of the trephine.

The paralysis and delirium, as well as the other symptoms, continued to increase, but no incision was made into the dura mater, as the pulsations of the brain were distinguished immediately beneath it, and nothing appeared to indicate the existence of pus.

On the 20th of April the patient died, when dissection discovered a layer of pus on the surface of the brain, commencing at least an inch and a half from the spot where the trephine had been applied, and extending as far as the commissura magna, near the border of which the brain was depressed by a little abscess. The arachnoid was injected and inflamed; there was no fracture whatever of the bone, and the purulent effusion on the dura mater had entirely disappeared.—*Clinique.*

The above is calculated to illustrate the generally hopeless nature of the operation of trephining, when performed for what may be designated the "secondary symptoms of injuries of the head. When our object is to elevate a depressed and broken bone, we remove in a great degree the cause of *future* mischief, and operate *before* the fatal inflammation has come on. When, however, we employ the trephine, as we would a lancet in the softer textures, merely for the purpose of *puncturing* the bone and giving issue to a collection of pus upon the dura mater, we are removing not the cause but the consequence of inflammation which has extended already too widely and deeply over the membranes or the brain itself.

Some of the symptoms which occasionally follow an injury of the head or disease within the cranium are extremely curious. Thus, all must recollect the case of the labourer, who, after a blow upon the head, was admitted into St. Thomas' or Guy's, and found by Sir Astley Cooper jabbering a language that none could understand, until a Welsh woman pronounced it to be admirable Welsh! The patient himself being a Cambrian, the injury of the brain had driven the English entirely "out of his head," and left him only the memory of his native tongue. A somewhat similar case has lately occurred to M. Dupuytren at the Hôtel Dieu.

Case 4. A young man, about twenty years of age, a miner by profession, fell from a height of a dozen feet, alighting on his heels, but receiving such a shock that he was insensible for half an hour, and unable to articulate distinctly. At the expiration of a couple of years he was brought to the Hôtel Dieu, being supposed to labour under hemiplegia.

The patient was taken into the operating theatre, and examined before the students and gentlemen assembled. He was emaciated, pale, of the middle height, rather embarrassed in his manner, but not having the least appearance of idiocy or feebleness of intellect.

What is your profession? said the Baron.

Mine—answered he with considerable difficulty, and it was only after repeated

efforts that he was able to articulate *mineur*.

What age are you?

Ving—t—t—d—eux—ans.

Your name?

Jacques Col—in—Col—as—Col—ard.

Have you any brothers and sisters? *Oui* How many brothers? *Un*. How many sisters? *Trois*. What is your father? *Peintre*. What profession is the husband of your eldest sister? *V V Ver—*, vitrier, (a glazier?) asked M. Dupuytren. He shook his head. Does he make bottles? Sign in the negative; and *V V Ver—* was all he could pronounce.*

Do you understand what I am asking you? said the Surgeon. *Oui*. Strike the table—he struck it; lift up your foot; put it back upon the ground; turn your head to the right side, to the left; walk forwards; return; put on your cap, &c. all was obeyed with the most military precision. The muscular motions of the tongue were free enough, and it was evident that nothing like paralysis or hemiplegia existed.

On being ordered to repeat *sa, sé, si, so, su*, he was unable to articulate the two latter, and merely pronounced the *o* and *u*. Instead of *mon pere*, he could only answer *pe—*; for *ma mere*, he answered, *me—*. The examination was completed, and the patient walking off without a salutation, when M. Dupuytren called him back, and told him to doff his cap. He did as he was bid. Bid the gentleman *adieu*; *ad—d—cu*, said he, and walked away.

On a subsequent day, experiments were made to ascertain whether the tongue, as the organ of *taste*, continued perfect in its functions. Salt, sugar, and pepper were the substances employed; the first of which he recognized, the second he confounded with the first, and the pepper he called rum. On giving him some water he knew and drank it without the slightest difficulty.

* This affection of the tongue appears to be an aggravated species of stammering. In a relation of our own, the above disagreeable infirmity was produced by a fall upon the head when a child, and has continued with the greatest obstinacy ever since.

The patient, as was observed before, evinced no signs whatever, of feebleness of intellect, and the muscular motions of the tongue were free and unembarrassed. M. Dupuytren was induced to consider the affection as resembling what occasionally occurs after apoplexy, or chronic affections of the brain, where the patient suffers loss of the memory of things, or particular words, as proper names, substantives, or adjectives. In some individuals, the power of judging and comparing objects is destroyed, and the reporter himself was acquainted with an old lady, a hemiplegiac, who preserved the use of her intellectual faculties, but could only answer to whatever question she was asked: *Saint Antoine, Saint Antoine!* M. Dupuytren compared the present case to the above, and considered the affection of the tongue, (both as an organ of articulation and of taste,) as rather depending on a general affection of the brain, than on a local lesion of the two sets of nerves which endow the organ with the properties of taste and motion.—*Clinique.*

ST. BARTHOLOMEW'S HOSPITAL.

14. INJURIES OF THE SPINE.

A strong muscular man fell from a height of 30 feet upon a tomb-stone, with his neck bent under him, and immediately afterwards was admitted into St. Bartholomew's Hospital, with all the symptoms of fracture of the cervical vertebræ, and some of those of concussion of the brain. Warm brandy and water was given him, and hot bottles placed upon his feet. At six next morning, he took a dose of calomel and jalap, and his water was drawn off, and at 10, the pulse being quick and hard, he was bled to $\frac{3}{4}$ ij. When Mr. Earle first saw the patient, at 12 o'clock, the breathing was performed by the diaphragm, but he "could use his arms and hands with some power." Rest was enjoined, but at 9 p. m. the man made some sudden effort, and instantly expired.

On dissection, the spinous processes and arch of the 4th and 5th cervical vertebræ were fractured and slightly displaced, the body of the 4th much comminuted, and projecting forwards, whilst

the ligaments of the right articular process had given way so as to admit of subluxation.

This case has formed the ground-work of a clinical lecture, by Mr. Earle, in which he condemns the operation of trephining the spine for fracture of the vertebræ, but as he merely adduces the arguments which were long ago brought forward by Charles Bell, we shall pass them by. Mr. Earle would seem to be somewhat of an optimist in fractures of the spine, or rather his prognostics are of a much more favourable cast than are entertained by the generality of his brethren. For our own parts, we should be led, from the cases we have witnessed, to entertain the very feeblest hopes, where fracture had decidedly occurred. If merely a spinous process be broken off, and the symptoms depend on the concussion which the marrow has received, the patient may do well, but when the fracture has extended to the bony arch or body of the vertebræ, as almost always happens, the chances seem to us to be a hundred, aye! a thousand to one against recovery. Mr. Earle, we fear, is scarcely sceptical enough in admitting facts and deducing inferences. Thus, he cites the present case, where the spinous processes and arch of two cervical vertebræ were broken and displaced, and the body of one not only broken, but actually comminuted, as one in which "it was far from improbable that the gradual amendment in the motion of the arms would have proceeded to perfect restoration, but for the untoward movement which arrested life."

We remember reading in the *Johnsoniana* (we allude to the *Samuel Johnsoniana*) a reply of the celebrated bear and lexicographer to Boswell, on the latter's declaring, that whether the Doctor believed some disputed point or not, he was full of faith. "Bah! Sir!" was the courteous answer; "what will fill a pint pot, won't fill a quart!" In the present instance we must play the quart pot! The facts that fill Mr. Earle are not enough for us.

HOPITAL DE LA CHARITE.

15 DISSECTION WOUNDS.

A Scotch medical student, having wound-

ed the thumb of the right hand with a rib; the part inflamed and swelled, the swelling extended to the hand and fore-arm, and deeply-seated abscesses ensued. Incisions through the fascia were made into the hand, the fore-arm and lower part of the arm, excessive suppurations followed, counter-openings were required in various directions, and at length the wounds were so far reduced in size, that the patient was able to leave the Hospital for the sake of country air.

A young man, a joiner, about thirty years of age, was sawing a piece of wood, when the saw escaped from its place, and slightly wounded the left thumb. Severe inflammation attacked the hand and fore-arm, and a few days afterwards, the patient was admitted, the wound on the thumb being nearly healed, but the hand and fore-arm considerably swollen. Deep-seated fluctuation being felt over the ball of the thumb, an incision was made into the part, and some purulent matter discharged. In a day or two, an obscure fluctuation was discovered on the anterior aspect of the fore-arm, an incision deeply made, and issue given to a considerable quantity of pus. The abscess was seated in the cellular tissue beneath the fascia, and extended as deeply as the bones and interosseous ligament. *Strict regimen—poultices of linseed meal.*

On the following days, the tumefaction of the hand and fore-arm had not diminished; the tendon of the flexor longus pollicis was exposed, and came away in sloughs; the wound of the fore-arm itself had a sloughy aspect, and furnished a foul discharge; and lastly, the radio-carpal joint became affected, and its cartilages appeared to be destroyed, or destroying by ulceration. There were, besides, much general fever, frequent shiverings, a little cough, slight pain on the right side of the thorax, and right shoulder, and a dull sound on percussion of that side of the chest. M. Roux was afraid of the existence of pleuritis, but nevertheless determined on amputation of the limb, which was performed upon the 12th of November last.

The steps we need not describe, but we may mention that it was at first attempted to remove the fore-arm at the elbow joint, but afterwards the humerus was sawn across above its condyles, which rendered the operation extremely tedi-

ous. On examining the limb, it was found that the muscles on the anterior surface of the fore-arm were completely dissected by the suppuration which had taken place. The abscess reached as high as the upper third of the fore-arm, and its bottom was seen to be formed by the interosseous ligament, the radius, which was bare and scabrous, and the flexor pollicis, which was entirely detached. The tendon of the above muscle was also exposed, and sloughing in the hand, and there was a collection of purulent matter beneath the aponeurosis. The flexor tendons under the annular ligament were bathed in pus, and the radio-carpal joint was filled with it, whilst the articulating surface of the radius and carpal bones were denuded of their cartilages in several places.

On the morning of the 13th, the patient was extremely low, the breathing was oppressed, and in the night of the 14th he expired.

Dissection. The surface exhibited a bilious tinge. On opening the thorax, there were found to be some old adhesions between the pleuræ of both sides, and behind these were evident traces of pleuro-pneumony. There were also some recently-formed false membranes, a considerable effusion of sero-purulent and sanguineous fluid, whilst the posterior border of both lungs was in a state of hepatization and infiltrated with pus in several points.—*Clinique.*

This was a melancholy case, and had the surgeon been aware of the condition of the lungs, he would never have exposed his patient to the pain and misery of a protracted and useless operation. We cannot, indeed, imagine, that there were any reasonable grounds for resorting to the knife, independent of the disease which existed in the chest. An injury had been received, and given rise to diffused inflammation in the deep-seated cellular tissue, which inflammation would in all probability attack the stump. The secondary operation in compound fractures is widely different, for in that case all active inflammation has subsided, the part is in a great measure reduced to the condition of a suppurating, scrofulous joint, and the amputation is performed to relieve the constitution of a local irritation, and a wasting discharge.

The symptoms of pleuritis were so

evident, that M. Roux should have gone further than *suspecting* its existence, he should have *pronounced* it. There is doubtless a disposition to the formation of tubercular deposits in the liver after serious injuries or operations, but for one case in which the liver is affected, there are three or four in which the respiratory apparatus is attacked. It is astonishing, indeed, how prevalent is inflammation and abscess in the lungs, as a consequence of surgical operations, and how insidiously they carry off the patient. We have lately seen two cases, in which they proved the immediate cause of death though during the life-time of the individual, they were not at all suspected. This should put the practitioner on his guard, and induce him to attend with the greatest anxiety to the condition of the chest. There is often little more than a slight dyspnoea; scarcely ever are the symptoms of pleuritis marked. Depletion should be employed with a liberal hand, and further than a person not aware of the insidiousness of the disease, would think was indicated by the symptoms, or even warranted.

2. ABSCESS OF THE BREAST.

Phlegmonous abscess of the mamma (of course we are not alluding to what is called milk-abscess) is not extremely common, but still it is more so than is frequently imagined, and has been mistaken for scirrhus of the breast. Much variety of opinion has existed on the preferable mode of treating abscesses in situations which are commonly exposed, as the breast or neck, especially in females. Some have recommended a small incision, some a large incision, and others none at all; but for our own parts, we think, like the camelion in the fable, that all are right, and all are wrong. If the practitioner is consulted early, he will frequently succeed in preventing any considerable accumulation of matter, by placing the patient on a depleting regimen, administering saline purgatives, and keeping the mamma moderately warm. If matter has formed to the extent of rendering resolution unlikely to take place, we should certainly prefer a moderate incision, made transversely, as soon as any redness, or discolouration of the skin appears. Of course the incision

should be made as low, or as much towards the axilla as is compatible with the evacuation of the pus. A fomentation should be used, as colder applications can seldom be endured. If the abscess should have gone to a greater extent, burrowing in the substance of the gland or cellular membrane which surrounds it, the incisions must be freely made, as the following case will show.

A woman, thirty years of age, received a violent blow upon the left breast, which soon became extremely swollen. At the end of a month, she was received into La Charité, the breast being enormously swollen, hard, and painful, the integument red and glistening, and fluctuation perceptible, though deeply-seated. Two large incisions were had recourse to, and gave issue to a quantity of healthy pus, evidently from the centre of the gland itself. The opening of the abscess gave relief, but at the expiration of several days, another collection of purulent matter was discovered, which appeared to have no connexion with the former; a free incision was made in this direction, the lancet passing into the midst of the cellular tissue encircling the gland, and in the course of a few days more, both of the abscesses being discovered by the probe to communicate deeply with each other, the communication was enlarged, and kept so by means of lint. The suppuration soon diminished, and the breast regained its natural volume.

The rapidity of the cure in this instance, is very fairly to be attributed to the free incisions which were had recourse to.

HOPITAL DE LA GARDE ROYALE.

16. TREATMENT OF CALLOUS ULCERS BY SHEET-LEAD.

Ulcers, from time immemorial, have been considered the opprobrium of our art, and the surgeon or doctor who can cure "a bad leg," where another practitioner has failed, is in a very fair way for having—many more of them to try his hands on. Sheet-lead is at present the *Coryphæus* among the remedies for ulcers on the Continent, and MM. Roux and Larrey have been giving it an extensive trial.

Two soldiers were admitted under the latter, into the Hôpital de la Garde, with callous ulcers in the legs. The surface of the sores was of a dirty brown, and their edges raised and indurated. After the limbs had been kept quiet for a day or two, and the inflammatory appearance had subsided, a layer of thin and flexible sheet-lead was applied to the surface of the sore, and fixed there by a bandage tolerably tight. In one case the method failed entirely, in the other, the ulcer diminished in size, the callous edges disappeared, and the granulations reached the level of the surrounding skin. Here, however, the remedy had no longer a favourable action, the ulcer continued pale and indolent, and the progress of the cure was completely stopped. Other trials were attended with the same result, and it appeared that, whilst the ulcer was callous with elevated edges, the sheet-lead was of the greatest service, removing the hardened borders, and bringing the surface of the sore to the level of the skin around. When this effect is once obtained, the lead should be discontinued, as it allows of no escape to the pus which is secreted, and prevents the cicatrization of the ulcer.

GUY'S HOSPITAL.

17. THORACIC DISEASES.

Case 1. A sailor, 38 years of age, who had been exposed to cold, wet, and hunger, for six months, began to complain, seven weeks before admission, of shortness of breath, oppression, and cough. His legs swelled, and he came under Dr. Bright in the following deplorable condition. He could scarcely be induced to go to bed, but stood against a chair, leaning his head on the back of it. In this position he continued four nights in succession, without ever lying down! His legs were much swelled—pulse 120 to 130—respiration 48, and laborious—urine scanty. He was cupped on the margin of the ribs—blistered—bled from the arm—took diuretic medicines, purgatives, &c. but without any material effect, and he died in ten days after his reception in the hospital, 9th March, 1827.

Dissection. There was a wash-hand

basin full of yellow serum, containing fragments of false membrane, in the right side of the thorax—very little fluid in the left side—two ounces in the pericardium—lungs sound—heart twice its natural size—semilunar valves of the aorta greatly diseased, being puckered, thickened, and corrugated, so as to have been unfit for their office. The aorta, about its arch, was also diseased. The liver was indurated, speckled, and inclining to the nutmeg-appearance.

Remarks. The above case occurred in Guy's Hospital eight or nine years after auscultation had been made publicly known in this country—and presented one of the finest opportunities for putting into execution some of the most important means of diagnosis. Yet no such attempt appears to have been made. The right side of the chest, wherever the water was present, would have sounded as dull as marble—the other side, as tight as a drum. No respiration would have been heard in the lower part of the one side—in the other, it would have been, most likely, louder than natural. The heart, being twice its natural size, would have beaten over a large space—and the semilunar valves of the aorta being puckered and contracted, the "*bruit de soufflet*" would have been plainly heard. But the ear would not be applied to the chest, lest it should look *quackish*, while the phlebotomist, the cupper, and the house-apothecary, were all set to work, in order to cure a disease that was utterly beyond the reach of art! Can the medical officers of public institutions expect to hold their stations in professional estimation, while they thus contribute to roll back the tide of improvement to its source? If they do, they come to the same sapient conclusion to which the ostrich comes, when he thrusts his head into a bush in order to elude his pursuers. He then sees nobody, and philosophically concludes that no body sees him!

Case 2. A man, 49 years of age, was admitted into Guy's Hospital, on the 7th February, 1827, who, for some weeks previously, had been labouring under severe cough, with occasional hæmoptysis. Three weeks before admission, he observed his ankles swell. His pulse was 100, and very sharp, not at all to be

felt in the right wrist. He could not lie down—respiration 44, and laborious—mucous expectoration and some blood—urine scanty and turbid. Purgatives, diuretics, slight mercurials, cupping, and blisters were applied; but he died in a week after coming into the hospital.

Dissection. Countenance apoplectic—very little fluid in the chest—lungs not generally unsound; but in three or four places, “decided effusion of blood had taken place into the substance, forming that appearance which has been called pulmonic apoplexy, with a circumscribed sense of hardness to the feel externally, and nearly a defined margin to the dark red part internally.”* The heart was twice its natural size—semilunar valves of the aorta thickened and ossified—whole arch of the aorta dilated and diseased. “But the most striking appearance was in the descending aorta, about two inches below the arch, where a spongy mass of bone filled up nearly the whole opening of the aorta for the length of an inch, and, at the origin of the celiac artery, the same appearance recurred.” The liver was granulated and small—the spleen hard—the kidneys sound.

It is not a little remarkable that life could have been preserved so long under such a serious obstruction to the course of the blood through the aorta. The size of the heart and the congestion of the lungs cannot be wondered at, considering the difficulties under which the central organ must have laboured in performing its function.—DR. BRIGHT’S REPORTS.

18. TRUE PULMONARY ABSCESS.

Dr. Bright, in his recent and splendid work, has only adduced one well-marked case of that rare termination of pulmonic inflammation—abscess. We shall lay this case—or rather the dissection, before our readers.

A man, aged about 30 years, was admitted under the surgeons of Guy’s Hospital on account of stricture. On the day of reception, however, he was seized

* These were the portions of lung from which the hæmoptysis proceeded.—*Ed.*

with pneumonia, for which the unusual means are supposed to have been employed. One month afterwards, Dr. Bright was desired to see him, but he was dying.

Dissection. The right lung was sound. The general substance of the left lung was solid, its colour grey. “A large irregular cavity was formed in the middle lobe, undefined by any distinct cyst, such as is usually seen in true tubercular phthisis, though there had been an effort in the vessels of the surrounding parts to throw out fibrin in such a manner as to prevent the indefinite extension of the suppuration. The cavity had, in part, emptied itself into a large branch of the bronchial tube. The pus which remained was very offensive and of a dark colour.” In no part of the lung was there any tubercular deposit.

We admit that this was an instance of pulmonary abscess—but we contend that it is a very rare termination of the disease. Such an abscess, perhaps, on a somewhat smaller scale, might heal, after a large discharge of purulent matter, and after exhibiting the phenomena of hectic fever, with emaciation and other symptoms of phthisis. Such cases are, doubtless, some of those where phthisis has been said to be cured.

19. COLLEGE OF PHYSICIANS *versus* DR. HARRISON.

This long expected and much bruited trial at last came on, in the Court of King’s Bench, on Thursday, the 3d of July. We do not think that either of the parties concerned has been a gainer in a moral point of view—while both of them will be decided losers. The question divided itself into two points of dispute—the validity and meaning of the charter, or the bye-law founded on it—and the proofs of actual practice, on the part of Dr. Harrison. Sir J. Scarlett expatiated very *costively* indeed on the *policy* or expediency of the law which he was instructed to enforce. In fact, he begged the jury to keep the *policy* of the law entirely out of sight, and direct their attention to nothing but the *fact* of Dr. Harrison’s having practised as a physician. The *speech* of the College coun-

sel, in short, did not consist of much more than twenty or thirty words. But there was one passage in it which deserves commemoration. Sir James observed that the law made no distinction between the most learned and talented (even the President of the college) and the most ignorant and empirical. All who did not conform to the law were punishable—and justly might the College be accused of partiality if it suffered some to escape, while it put the said law in operation against others!

Dr. Harrison's counsel took an exception, in limine, against the validity of the Charter, as not being confirmed by Parliament, and the point was reserved to be argued before the judges.* The proof—or rather the culpability of practice, then went to the jury. The principal witness of practice was a maid-servant belonging to a young lady, with a crooked spine—and well might the patient curse the day that ever she employed a spine-doctor! The cross-examination of the duenna brought out all the secrets of spinalogy—the thumbing, shampooing, stretching of the poor young lady's back, &c. In addition to medicines which were prescribed in aid of the manipulations, it was sworn, that Dr. Harrison prescribed medicine for the maid, while he was attending on the mistress. An apothecary also proved that he made up some of the prescriptions, which were *internal* medicines, and in the hand-writing of Dr. Harrison. These were the proofs of practice, as far as witnesses were concerned; but Dr. Harrison's letters to the College, as published in all the journals of the day, rose in judgment against the writer, and while they proved practice, they certainly made him cut a figure that was any thing but enviable, as will be presently seen.

Then came the defence—and a unanimous one it was! This defence consisted in pleading that Dr. Harrison only practised surgery! As far as the lady

with the crooked spine was concerned, the counsel certainly made good his point but failed in respect to the maid. The sheaf of prescriptions, however, which were produced and sworn to in Court—the evidence of the maid—and, above all, the letters of the defendant himself, formed a chain of evidence, as clear as the sun at noon-day, that Dr. Harrison had practised physic, *as a physician*, for nine or ten years past. This was the decided opinion of the judge—and it must have been that of every individual within the walls of the court, jury and all. Yet what was the verdict? FOR THE DEFENDANT!!

We shall now make a few comments on this extraordinary trial. Our readers are aware that this is the *only* journal which has strenuously resisted the procedure of the College against the regular graduates of regular Universities.* But, as men's memories, now-a-days are very short, we shall take the liberty of refreshing them by a few quotations from former articles.

FIRST EXTRACT.

"This fining and imprisonment, after failing in an examination, shews the difference between former and present times. What would have been the consequence if Dr. Armstrong and Dr. John Mason Good had been *fined and imprisoned* immediately after their rejection by the present College!

"Tempora mutantur, et nos mutamur in illis."

"The College ought to bear in mind how dangerous a procedure it is to kindle up the exercise of Statutes at which science and sense *should* blush—and for which the College itself *may* perchance grieve!"—No. 14, Oct. 1827, p. 517.

SECOND EXTRACT.

"For our own parts, had we been in Dr. Harrison's place, we should, after what had passed, have given up the admission of practice, in order to bring the question to a legal issue. The only reasonable excuse for withholding this admission, is, to try whether the College

* We were surprised to find it stated, in the Medical Gazette, that the point of law was overruled by the judge. We heard him distinctly say that he would reserve it for the court above. Mr. Campbell was prophetic in his opinion that it would never be argued there.—Ed.

* We say the graduates—or rather the *diplomas* of regular universities—for the character or conduct of the individual possessing them has nothing to do with the justice or injustice of the procedure.

can bring home the *necessary legal proof of practice*, against any man. As the prosecution must hinge entirely on the acts growing out of the charter of Henry VIII. and as it is there decided that a man must practice (*de die in diem*, of course) for the space of a month, before he is finable; so we apprehend that it would be extremely difficult to bring home such proof against Sir Henry Halsford himself. If we were on the jury, (for a jury and not a judge must decide as to the proof of Dr. H's practice,) we should certainly interpret the statute as '*uninterrupted practice for 28 days*'—and it is just possible, whatever the lawyers may opine, that a jury will look at the act or statute with the eye of common sense, and not under the influence of corporate pride or legal quibbling."—No. 16, Jan. 1828, p. 248.

After the foregoing extracts, it is hardly necessary to say that we have been tolerably fortunate in our *prognoses*. We appeal to every man in court—and to the judge on the bench, whether it was not clearly proved, by every species of evidence, including the written confession of the defendant, that Dr. Harrison had practised as a physician in this metropolis for ten years past—AND YET A BRITISH JURY DECIDED THAT SUCH PRACTICE WAS LEGAL. What is the oath administered to the jury? It is this:—"You shall a true and proper verdict find, *according to the evidence*, so help you God." We entirely agree with the learned judge, in his charge, that the evidence including the defendant's own letters, was totally at variance with the defence set up, viz. "that his practice was surgical;"—therefore the verdict was apparently founded on the injustice of the claims of the College to prosecute and fine a man for prescribing an internal medicine, and signing the initials of his name to the prescription. Volumes of these prescriptions and living witnesses proved this kind of practice—but the jury would not levy a fine for such practice. This, we should think, will set the question at rest. It is quite impossible that the President of the College of Physicians can ever again expose that body to ridicule, by coming into Court with an antiquated Charter of Henry VIII. or rather of his monkish minister. One of the extracts above quoted will show that we predicted the sentiments of a jury on the

attempt to enforce laws which violated common sense.

But what shall we say to the defendant? He has covered himself—not with laurels, but with disgrace. After all the blustering and bragging about affording the College every facility to try the *legality* of their Charter, he first withheld every proof or admission of practice—and when these were wrung from him, and found in his own letters, as well as among his own patients, he skulked out of the contest, and attempted to prove himself a surgeon! Proh pudor! We say *attempted*—for in this he failed. He did all in his power to leave the question *worse* than he found it. For had he baffled the College merely by proving an *alibi*—by showing that he was a physician only by name, while he was a surgeon in fact, what would he have done for his alma mater—for the graduates of regular universities, by such procedure? The question is easily answered. He would have left them completely at the mercy of that law which he stood forth, in big words, to abrogate! In short, we have not words to express our contempt for this tergiversation. But as the Jury were sworn, not to return a verdict according to the line of defence, but according to the *evidence*;—and as this proved Dr. Harrison to have practised as a physician, in spite of his shuffling; so the verdict of the jury may serve as an ominous warning never again to attempt the levy of a fine on any regularly educated medical practitioner. We cannot but entertain some faint hope that this trial will open the eyes of the College to the danger of the path which they are pursuing—to the impolicy of *compelling* to the licence, when they have it in their power to render the licence an honour, and consequently an object that would be eagerly sought after. Let not the ears of the public be shocked, and the feelings of the profession outraged by prosecutions instituted against the diplomas of our best medical universities, while quacks of every description are suffered to overrun the land.* As for

* This trial shows that the College has now no power over practitioners who make any pretence to surgery. The judge indeed observed, that if a man practised

Dr. Harrison—he has amply verified the sentiment which we expressed in our last number (p. 88) when reviewing his book. "Now, in our humble opinion, this 'bold-er flight, is like that of ICARUS—a complete descent. When he (D. H.) soars, on Icarian wings, to the professional public, the wax dissolves—and down he goes." Like a blustering bravado, this modern reformer challenged the College into open combat; but when the College met him fairly and honourably (however impolitically) in the field, he slunk away, like another Whitelock, with a "white feather in his tail."*

20. PARALYSIS CURED BY LIGHTNING.

A vessel, while pursuing her course across the Atlantic, was struck several times with lightning, and the men were strongly electrified. Among the passengers was a man who had been paralytic of both lower extremities for more than three years. He was in bed when the electric discharge took place, and his ship-mates were not a little astonished to see him jump out of his cot and march upon deck, where he continued to walk about as brisk as any of them. The cure was

surgery and *physic*, he was liable to be prosecuted by the College. But of what use is the exhortation of the judge? The jury take the liberty of thinking for themselves, and their verdict was in the very teeth of the Bench. It would be far better for the College to apply to the Legislature for a new Charter with ample powers—first securing the cordial co-operation of the profession by a liberalization of its bye-laws.

* It is probable that this trial will give rise to more consequences than are, at present, suspected. The doctrine that all diseases are of *local* origin, is rapidly gaining ground; and consequently, the difficulty of distinguishing *medical* from *surgical* cases will be totally impracticable. Let the College look to this. Let them establish their claims and their distinctions on science, sense, and professional feeling—not on antiquated laws, against which every liberal mind must revolt! We are not the flatterers, the SYCOPHANTS of the College—and, consequently, we may be deemed its ENEMY. TIME will tell who are the REAL friends or the REAL enemies!

not temporary; for he has enjoyed the use of his limbs ever since. We have lately seen some remarkable effects produced by strong shocks of electricity thrown along the nerves leading to paralyzed muscles:—also in torpid states of the liver, when the galvanic fluid was thrown through that organ.]

21. SIR MATTHEW TIERNEY'S POWDER.

We do not see why a TIERNEY should not have his powder as well as a JAMES or a DOVER. This is the age, and this is the country for nostrums—and we see much more interest excited by the announcement of one specific remedy than of twenty general principles. A man tells us "arsenic will cure an ague." This is easily understood by all capacities. The name of the disease is only to be ascertained, and any chemist can supply the medicine. But, if the varying forms of the malady—its stages—and the temperament of the subject, are to be studied—that entirely alters the case! The empirical road is by far the pleasantest to travel. The lovers of nostrums will be delighted to hear that we can furnish them with a powder which will make their fortunes. It is a panacea for almost every ill that flesh is heir to—it removes all obstructions—and will ultimately supersede every other kind of aperient. It is indeed a kind of LOVE-POWDER—since we are assured that whoever takes it once, will be so much in love with its operation, that he or she will never afterwards relinquish its use. The following is the formula:—

R. Sulphatis sodæ. . ʒiss.
Carb. magnesiz, ʒss.
Sulph. magnesiz, ʒij.

The two sulphates are to be dried in an oven, till all the water of crystalization is completely evaporated—and then the whole three are to be well rubbed together, and kept in a stoppered bottle. The dose is one or two drachms, in a draught, or in a tumbler of warm or cold water early in the morning—repeating the dose, if necessary. Its operation is very mild and pleasant, and we recommend this powder to be kept as a very useful extemporaneous formula.

22. OBSERVATIONS ON DEPOSITIONS OF PUS AND LYMPH OCCURRING IN THE LUNGS AND OTHER VISCERA, AFTER INJURIES OF DIFFERENT PARTS OF THE BODY. By THOMAS ROSE, Esq. Surgeon to St. George's Hospital.

[Med.-Chir. Trans.]

Ever since the days of Morgagni, and, indeed, long before his time, it was observed that abscesses, or at least collections of matter, occasionally took place in certain viscera and cavities after injuries of the head. Morgagni combats the idea, long entertained previous to his time, that matter descends from the head to the liver only in such cases. Both Valsalva and Morgagni record instances where the lungs and cavities of the thorax and abdomen were the parts affected by purulent dépôts, after blows on the head. The Memoirs of the Royal Academy of Surgery contain several papers, by Quesnay, Bertrandi, Andouillé, and others, on the subject of hepatic abscesses succeeding cranial injuries—and Desault considered it a very common occurrence—much more common than it has been found in this country. Desault regards these hepatic abscesses as resulting from the disturbance excited in the nervous system; while Richerand endeavours to shew that they must depend upon some injury sustained by the liver at the time of the accident. But, whether hepatic abscesses happen as frequently as the French surgeons have represented, or not, it is certain that purulent collections in different parts of the body are not unfrequent after injuries of the head and of other parts—nay, after operations, however carefully performed. The author of the present paper (Mr. Rose) met with several instances of their occurrence, in the lungs particularly, during the Peninsular War, after amputations and wounds of the extremities. The same has been observed by some of the French surgeons, especially Baron Larrey, who has related the case of General Caffarilli, who died on the 19th day after amputation of the arm. Dr. Hennen has related some interesting cases of this kind in his work on Military Surgery—two of abscess in the lungs, and one in the liver.

But we need not multiply the instances any farther, as the fact has now been well known for some centuries past,

though the pathological writers of this country have taken little or no notice of such an occurrence.

Mr. Rose has not been able to connect these visceral abscesses after injuries with any peculiarity of constitution, nor with any peculiarity of treatment. They have occurred when the most vigorous depletion had been pursued in young subjects—and where nourishment had been properly supplied in more advanced age. In all the cases which he has seen, these abscesses took place at some period between the end of the second and that of the fifth week after the accident. In respect to the theory of these purulent formations, Mr. Rose thinks that the explanation of Desault, above noticed, is the most rational, "They are to be classed amongst the effects of constitutional irritation arising from local injury, and are certainly striking illustrations of the irregular action in the vascular system to which that irritation may give rise."

It is not very uncommon to find inflammation or congestion in particular organs immediately after the constitution has rallied from the shock of a severe accident or surgical operation, attended with well-marked symptoms of inflammation. But the visceral affections referred to in this paper have a peculiar character, connected, our author thinks, with the rapid formation of pus or lymph in the parts affected. The period of this formation is that in which suppuration takes place in the injured parts, especially if great constitutional injury has preceded. These purulent dépôts are often unsuspected, till they are discovered on dissection. The presence or the formation of matter, however, is sometimes indicated by rigors, and other symptoms of suppurative fever, at a time when the wound itself is disposed to heal.

The appearances *post mortem* are remarkable and not easily described in words.

"The disease consists, apparently, of depositions in the cellular texture of the affected organ, partly of a white or yellowish coloured lymph, and partly of pus. These depositions vary in size from beyond the bulk of the largest walnut to something less than a common pea. Where the lymph is most abundant, they may be described as a soft white tubercle of irregular shape, not contained in a

cyst, but imbedded in the cellular substance of the part, and gradually blending with its natural structure. When pressed, some pus exudes from them. Where the pus collects in greater quantity, it is lodged in an irregular cavity, probably in the middle of some of the tubercles, and the walls of the abscess are formed of flakes of lymph. The number of these tubercles and abscesses vary in different instances, there being sometimes only one or two, and sometimes the whole viscus being filled with them. In the lungs they are chiefly formed in the parts adjacent to the pleura pulmonalis, and there is often at the same time an effusion into the cavity of that membrane of a sero-purulent fluid mixed with lymph. In the liver and spleen they are dispersed throughout the substance, sometimes shewing themselves in one or more yellowish patches, not elevated, on the convex surface of the great lobe of the former viscus, and at other times lodged in its substance. The parts adjacent to them shew evident marks of increased vascularity." 266.

Mr. Rose does not enter on the treatment, having little to suggest on that head. The reduction of vascular action and tranquillization of the nervous system are the obvious indications—more easily pursued than fulfilled! When the abscesses are once formed, they will be found, as Desault long ago observed, to be almost invariably fatal. Four cases in illustration are related by Mr. Rose, and two by Mr. Lawrence. We shall glance at some of these.

1. The first was a soldier, who was shot through the elbow-joint at the storming of St. Sebastians, in 1813. The inflammatory symptoms in the arm did not run very high, but there was a good deal of irritative fever. After three weeks' attempt to save the arm, Mr. R. was obliged to amputate. On the second morning after the operation, the patient had a rigor and a perspiration, which returned next day. The constitutional symptoms now increased, and he expired on the seventh day after the operation, having exhibited symptoms of oppression about the chest till the last. There was more than a pint of sero-purulent effusion in the left side of the thorax, and the pleura highly inflamed. Numerous cir-

cumscribed abscesses were found in the cellular structure of the lungs, but perfectly distinct from the parenchyma, by which they were surrounded. They were not invested with a cyst, and some of them appeared to consist of lymph.

2. This was a case of compound fracture of the leg, admitted into St. George's Hospital in July, 1823. Considerable inflammation and tumefaction supervened, together with erysipelas, which spread over the thigh and abdomen. Deep incisions were made—venesection was employed, and the symptoms subsided; he was seized with a rigor—his tongue became dry and brown, with hot skin, and pain in the epigastrium. He got better for a time, then relapsed, and died in a state of stupor on the 20th day from the date of the accident. On dissection, there was found some serum in the ventricles of the brain—several circumscribed abscesses in the lungs—and, on the convex surface of the liver, a large mass of a perfectly white colour, under the peritoneal surface, being two or three inches in diameter, and not at all blended with the neighbouring parenchymatous substance of the liver, which was sound. This mass consisted of loose lymph, with pus diffused through it. There was another similar mass in another part of the liver. It is not quite clear that these depositions were produced during the period that succeeded the accident, though it is not impossible.

3. Two or three interesting cases are added by Mr. Lawrence—one occurring after an operation for the removal of a cartilage from the knee-joint, and where a great number of small, yellow, elevated spots were observed on the convex surface of the liver, which discharged a thin, purulent fluid when cut into, leaving a yellow fibrous substance, like the flakes of a scrofulous abscess. These depositions varied in size, from that of a pea to that of a hazel-nut, and were several hundred in number.

23. CHLORIDE OF LIME.

Mr. Docker, surgeon of the Windsor Castle, East Indiaman, has made a report

on the effects of this important agent in the destruction of unwholesome effluvia between the decks of ships. As the vessel approached the tropics, they sprinkled the orlop decks with the solution, twice a week, and they found that it completely succeeded in removing the disagreeable close smell which always prevails when a number of persons are confined in a limited space, and without a free circulation of air. Mr. Docker attributes a great deal of the good health of the crew and passengers to the agency of the chloride.

During their stay at Saugur Island, in the mouth of the Ganges, the gun-deck was regularly sprinkled, morning and evening, with the solution. The consequence (he thinks) was a comparative immunity from cholera, which was raging fatally in the otherships. The wind blew from the shore all the time, and was loaded with morbid miasmata. In China they used the chloride, and escaped the dysentery which prevailed in the river Tigris at the time. Mr. Docker found the solution of incalculable value in removing the putrid and disagreeable smells that are usually generated in the sick-berths of ships. He also verified the efficacy of the solution, as a gargle, in arresting mercurial ptyalism. In a case of sloughing wound, where all the ordinary remedies had failed, "it speedily put a stop to the sloughing process, and induced the sore to take on a healthy appearance."

We think there can be no doubt that this destroyer or correcter of putrid effluvia will be of great service in the navy, and form a valuable addition to hygiene in general.

24. ON THE EMPLOYMENT OF LUNAR CAUSTIC IN PLASTIC INFLAMMATIONS OF THE MUCOUS MEMBRANE OF THE MOUTH, NARES, THROAT, &c.

The mucous membrane lining the above conduits, and also that lining the larynx and trachea, is very subject to inflammation, and this inflammation is often accompanied by an exudation which becomes converted into a kind of false membrane. To this affection Laennec and some others have applied the term

plastic. It is often epidemic—sometimes sporadic. But the membranes above-mentioned are subject to a chronic inflammation, of a passive kind, in which the vessels are enlarged, their secretions increased and vitiated, and the patient kept in a very uncomfortable state for years. The uvula frequently becomes relaxed and elongated, and by tickling or irritating the epiglottis, keeps up a hacking cough, which excites great alarm in the mind of the patient and friends. It is in this complaint, a very prevalent one, that an eminent surgeon of this metropolis has gained great reputation by employing lunar caustic in solution, on a sponge or brush, and very freely applied to all the above parts, as far as they can be reached.

A French physician [M. Gerouard] lately transmitted a memoir on this remedy to the SOCIETY OF MEDICINE, in which he relates many cases of its success in the plastic inflammation alluded to, and recommends the caustic to be applied, not only to the fauces, nares, and parts adjacent, but to be introduced into the larynx, where the inflammation has affected that part. M. Gerouard frequently employs the nitrate in substance, carefully fixed in a silver tube, straight or crooked. He observes, that to cause the false membranes to be detached from the larynx or trachea, it is not always necessary that the caustic should enter these conduits. "It is sufficient, in many cases, to touch the superior aperture. I have seen patients eject membranous tubes, of some inches in length, the day after the rima glottidis was touched with caustic." Dr. Authenac has also laid before the public some cases where the lunar caustic proved very beneficial. Dr. Brown, of New York, has also published a paper on the same subject, in the January Number of the Medical Recorder for the present year.

But we wish to draw the attention of the profession to the employment of this topical application, in the chronic inflammations and relaxations above-mentioned, as well as in laryngeal affections simulating phthisis. We have seen some cases recently where chronic coughs, accompanied by muco-purulent expectoration, that had harassed patients for years, and baffled all their physicians, gave way, in a very rapid manner, to a

few applications of solution of lunar caustic on the sponge of a common probang. These hints may prove useful to many of our brethren. The state of the fauces should be carefully examined in all cases of chronic cough; and the epiglottitis may be often seen by pressing down the tongue. That part, and even the rima glottidis may be always examined with the finger.

25. VAPOUR BATH.

It is not our intention to dilate on this important remedial agent. Its powers are every day becoming more apparent. But we believe that the utility of the vapour bath may be much increased by every contrivance which adds to the facility of distributing the vapour with different degrees of intensity to different parts of the body, to which it may be desirable to induce what is called a determination of blood. Our ideas will be more easily understood by a short statement of facts.

Captain Jekyll, of the Royal Navy, having been long a sufferer from rheumatic gout, was advised to try the hot baths at BATH. But each bathing excited fever and head-ach. The vapour-baths were then resorted to; but he found a great inconvenience attendant on their being much hotter at the upper part than at the feet. They consequently gave him a violent head-ach—his gout left the feet, and caused excruciating spasms in his stomach.

"Finding" says Captain J. "that steam removed the gout to that part where the heat was the greatest, I was convinced, that by reversing the plan, and making the feet much hotter than the upper part, the gout would go from the stomach to the feet again: consequently, I invented a vapour bath which happily produced that desired effect, and immediately removed the gout from the stomach to the feet, relieved the pain, and promoted a comfortable sleep for some hours; and so effectually subdued the gout, that in two days I was perfectly recovered. I have since, on several occasions, experienced the correctness of my system, of making my vapour bath ten or twenty degrees hotter

at the feet (by Fahrenheit's thermometer) than at the upper part of the bath; which is easily regulated by the person taking the bath, or by an assistant. The gout descended to the feet; where, the pores being opened, a profuse perspiration took place, and those paroxysms, that so often confined me to a bed several weeks at a time, have since yielded to steam with very little pain, and scarcely one restless night in about as many days as it previously continued weeks."

The bath which Captain Jekyll has constructed, is extremely simple, and easily managed, as we can testify from seeing it in operation. It has generally a calico covering; but an oil-silk one is preferable as it confines the steam much better. The dress is kept off the shoulders by a hoop and three supporters, and the whole apparatus packs in a small box, and costs but a few pounds. It is put in operation in the course of a few minutes by merely putting the boiler on the fire, and placing the patient in a chair on the floor. This portable bath may be seen at 38 Warwick Street, Golden Square. We conceive that it will prove a valuable apparatus, in a small bulk, in our fleets, armies, and colonies, as well as at home. The various purposes to which it may be applied, will readily suggest themselves to our medical readers.

P. S. The following case which we have just perused in a late number of the *REVUE MEDICALE*, will be found to bear on the subject now under discussion.

Case. The SUBJECT was no less than a PRINCE—the Prince of Wagram, a personage who figured on the political stage during the reign of Napoleon. He is now in his 62nd year, of robust constitution, but subject, for many years past to annual attacks of gout, which have latterly increased in intensity. The feet were the domiciles of the disease, and the Prince had recourse to patience, in general, for his cure. The year before the fatal campaign of Moscow, the prince was attacked with an unusually severe fit, and the fever and inflammation ran so high, that he was obliged to be bled and considerably reduced. The almost superhuman fatigues of the Russian expedition and retreat were attended with one apparent advantage—escape from the Autumnal attack. But whether it,

was this escape, or the privations of body and anxieties of mind that affected the prince's health, it so happened that he reached Posen in a very deplorable condition, and it was at this time that M. Mestivier was called to him. He found the prince in the greatest anguish which it is possible to imagine—the face and body quite yellow—the countenance sunk—the lips dry and pale—tongue coated—yellow—thirst urgent—hiccup constant—breathing short and difficult—no cough or palpitation—the epigastric region so tender and painful that he could not bear the weight of the bed-clothes. This pain occasionally stretched towards the right hypochondrium—there was no passage through the bowels for three days—urine scanty and red—pulse small and quick. Dr. Mestivier, as well as the physician in attendance, conceived the case to be gall-stones, and prescribed castor oil and purgative lavements. The oil was vomited, but the bowels were opened most copiously. No amelioration of the pain took place—it was inexpressible, and debility was increasing. The physicians now began to suspect that gout had fixed its residence in the stomach, instead of the extremities, and sinapisms were applied to the feet, after hot pediluvia. The night was passed without sleep, and in dreadful sufferings; but next morning the feet became the seat of great inflammation from the sinapisms, and one of them was evidently affected with gout. The pain in the epigastrium vanished, and the gouty foot went through the regular stages without any sinister accident.

Cases analogous to the above are not unfrequent, and in such circumstances we have little doubt that the vapour bath directed to the extremities would very rapidly relieve the stomach, brain, heart, or other part labouring under the retroceded or misplaced gout.

leptic cases, and the formula which he employed was that given by Magendie, under the title of syrup of hydrocyanic acid, which consists of one part of "medicinal prussic acid" to 128 parts of clarified syrup. This medicine, when prescribed in private practice, was always procured at the shop of M. Pelletier, and M. Ferrus was in the habit of giving an ounce of the syrup for a dose, with good effects. This dose contained not quite five grains by weight, of the medicinal prussic acid. M. Ferrus wishing to try the medicine on a large scale at the BICÊTRE, ordered it in the dose of an ounce, to 14 epileptics. The house surgeon observed at the time, that they never ventured on more than a drachm of the syrup in the 24 hours—and that, even in this dose, considerable effects were frequently seen to result. This observation induced M. Ferrus to order only half an ounce, although he was confident, from repeated experience, that double the quantity would be borne with safety. The medicine was accordingly procured from the "PHARMACIE CENTRALE DES HÔPITAUX," where, unfortunately the syrup was prepared according to the CODEX, in the following manner:—

R_x Syrupi Simplicis partes 9.
Acidi Hydrocyanici p. 1. misce.

By this form, the dose (3jss) contained upwards of 57 grains of the prussic acid!! The infirmarian man commenced the exhibition of the medicine on the 14 epileptics. By the time he had given it to the seventh patient, the first was dead. In less than 20 minutes the whole of the seven expired! Magendie had long ago condemned the formula given in the NATIONAL CODEX. The following are his words, and unfortunately they have proved but too prophetic!

"Cet syrop, ainsi préparé, ne pourrait être administré que par gouttes. Si par malheur, une once etait mêlée dans une potion, il en resultera un breuvage mortel."

26. POISONING BY PRUSSIC ACID.

The horrible catastrophe which happened a few weeks ago in the Bicêtre, is known to our readers. The following mistake was the cause of the fatal accident. M. Ferrus, a talented physician, was in the habit of employing prussic acid in epi-

We fear that M. Ferrus will not escape without some censure. It surely is the duty of the physician or surgeon to know the composition and strength of medicines as directed by the National Pharmacopœia; and if he prescribes according to other formulæ than those contained in the said pharmacopœias, he should explicitly point out these extra-official

forms for the guidance of the compounder of his prescriptions.

M. Gendrin, the editor of the "*JOURNAL GENERALE DE MEDICINE*," has made some severe remarks on the ignorance displayed in the National Codex, and argues strongly for the abolition of all national pharmacopœias. He maintains that, instead of leading to uniformity of composition, they produce a diametrically opposite effect. Every chemist goes by his own formula, and the practitioner is daily and hourly deceived by prescribing according to a pharmacopœia which is hardly ever followed. In this sentiment we cannot entirely agree with our Parisian confrere. We know, indeed, that the evil of which he complains, exists; but we do not think it would be remedied by the abolition of a national or standard Pharmacopœia, however imperfect that standard may be. We are of opinion that, where any potent, and subsequently poisonous substance is prescribed, it ought to be done so in an extemporaneous form. for example, the prussic acid should be prescribed, not in a formula where it only makes a part, as in the above syrups; but in draughts or mixtures, where the quantity of the acid is distinctly specified.

The bodies of the seven epileptics poisoned by the prussic acid, were examined by Messrs. Adilon and Marjolin. There was no physical lesion discovered to account for the epilepsy. The hearts were empty, and the blood was fluid in the vessels. It is curious that the bodies exhaled no odour of prussic acid.

27. ON THE CATARRHUS ÆSTIVUS, OR SUMMER CATARRH. By J. BOSTOCK, M. D. &c.

[Med. Chir. Trans. Vol. XIV.]

In the tenth volume of the Medico-Chirurgical Transactions, Dr. Bostock gave some account of a disease which he conceives to be of "a specific nature," occurring only at a certain period of the year, and from which the author himself had suffered. In short, it was the *hay-fever*, of which we have heard so much, for fifteen or twenty years past, and to which Royalty itself, as well as Dr. Bos-

tock, is subject.* Since the publication of Dr. B.'s paper, he has seen or received accounts of twenty-eight cases—eighteen of these were distinctly, and ten less imperfectly detailed. They all agree as to the season of year in which the complaint occurs—the seat of the disorder (mucous membrane of nose, fauces, and "vesicles of the lungs")—and the exciting cause.

Except a short observation of Dr. Heberden's, our author has not been able to find any account of the disorder in any work, ancient or modern. In 1822, Dr. Baillie informed Dr. Bostock that he had seen three cases similar to his own. Sir Henry Hallford could have given him at least one case, as early as 1814, at which period the writer of this article transmitted to Sir Henry an account of the disorder as it occurred in an exalted personage of the present day. Be this as it may, it appears that, in the twenty-eight cases above-mentioned, the complaint commenced about the end of May or the beginning of June, and continued from four to eight weeks.

"Most of them are attended with fulness of the head, stoppage of the nose, sneezing, watering of the eyes, and discharge from the nostrils. In about half of the whole number the respiration is considerably affected, and in three or four instances it is almost the only symptom. Some of the cases are attended with distinct cough, most of them with irritation of the fauces, and some with a degree of sore throat. Actual inflammation of the eyes is not a very common occurrence, and in some of the cases there is not even the discharge of tears, or the irritation of the eyes. The degree of general indisposition varies very much in the different cases; in some, the patient, during the whole period, is unable to use any exertion, or to continue his ordinary occupations, while, in other instances, he feels no inconvenience, except what arises from the fits of sneezing, and the copious discharge from the nose." 439.

No decided connexion between this

* His Royal Highness the Duke of Clarence suffered from this complaint for a great many years. It occurred, in May or June, at the period of cutting down the hay.—*Ed.*

disorder and age, sex, constitution, or mode of life, could be traced. In no instance, has the liability to it been lost by time—all the cases occurred in the middle or upper classes of society—a majority of them were males. It appears to occur equally in town and country.* The proximate cause, or rather condition, is obviously an affection of the mucous membrane of the parts already mentioned. Dr. B. divides the disease into four varieties according as the eyes, the nose, the fauces, or the lungs are affected. It is only in this last variety that Dr. B. has observed the constitutional symptoms of fever and subsequent debility in any considerable degree :—

“ And in this case I think we may account for the effect, by supposing that the thickened state of the membrane which lines the vesicles, prevents the oxygen of the inspired air from duly acting on the blood.” 442.

The above passage, short as it is, will show how men are warped by theory and prepossession! Dr. Bostock is a great chemist. The hay-fever is therefore a deficiency of oxygen in the blood! Alas! Poor Physic! No sooner does a man of genius start on a journey of investigation, than he begins to curvet, from side to side, in pursuit of the apples of Hippomenes—or rather of hypothesis, by which he generally loses the race! Dr. B. sets out with the proposition that the vessels of the mucous membrane are in a state of “*increased action*,” and therefore, we suppose, they have so much other work on hand, that they cannot attend to the absorption of oxygen or the elimination of carbon! Has it never occurred to Dr. Bostock that inflammation of the mucous membrane of the stomach or bowels will cause fever and other constitutional symptoms? Is this fever—are these constitutional symptoms the result of defective oxygenation of the blood?

* The case to which we have alluded occurred at *sea*—at least, on the coast of France, and therefore far from the immediate effluvium of hay. But it must be recollected that, in the hay-making season, the odour of the drying vegetables is expanded universally through the air of northern countries.—*Ed.*

But let us turn to the exciting cause. The popular opinion is, as we observed above, that the effluvia of the newly-cut hay give origin to the disease. Dr. B. denies this, as far, at least, as his own case is concerned. Thus he made choice of Ramsgate as his residence, during the summers of 1824-5-6. The last two of the above years were remarkable for their heat; but by procuring a house on the cliff, exposed to the German Ocean, and commanding complete ventilation, he nearly escaped the disease in 1825. In the next year he had some severe paroxysms, though they were mitigated by the coolness of the situation. As there is “not an acre of meadow ground in the Isle of Thanet,” Dr. B. thinks it must be the inevitable conclusion that the hay had nothing to do with the disease. We do not agree with Dr. B. respecting the non-existence of an acre of meadow ground in the Isle of Thanet—and allowing that the hay was capable of producing the disease, we cannot suppose that the Isle of Thanet, or any other spot in England, can be free from the effluvia which are wafted about on every wind that blows. During the Summer of 1827, Dr. B. spent his time at Kew, in the immediate vicinity of meadow grounds. The Summer was very cool, and “except during a few *hot days*, when I suffered *as usual*, my complaint was in a much less degree than the average.” The advocates for hay-miasmata would say, that the cool season was unfavourable to the plentiful production of the cause—and when the days were *hot*, the Doctor suffered as usual. But, putting himself out of the question, Dr. B. acknowledges that he has received information from various quarters, “of individuals who have felt no doubt that the complaint was brought on by the effluvium from hay, and was relieved or prevented by avoiding this effluvium.” For our own parts, we have little doubt that the complaint is dependent on some exhalation from the surface of the earth, though the precise nature of the miasm may forever elude our senses.

In respect to the cure or mitigation of the disorder, our author has little to say. Most of the individuals included in the catalogue have tried change of residence, with more or less benefit. In two cases of considerable severity, the patients were better in London than in the country.

A third derived benefit from the sea-air. In other instances, no benefit was obtained by change. In respect to medical treatment, Dr. B. is convinced that depletion is injurious, and that some benefit is derived from a moderate use of tonics. On these two points, and on these *only*, do all accounts agree. We think this very circumstance corroborates the supposition that the complaint arises from malaria. Speaking generally, all malarious diseases require tonics sooner or later in the course of their progress. Dr. B. does not expect a cure in his own case. The *habil* has probably become too inveterate.

"Bathing the eyes in tepid water, and fomenting the face generally, occasionally applying small blisters to the chest, mild purgatives, small doses of ipecacuanha, Dover's powder, squills, and digitalis, bathing the feet in warm water, a moderate, but not spare diet, perfect rest, and carefully avoiding all extremes of heat, comprise the whole of the means that I have found useful to myself." 446.

He has been informed by a friend, that great relief was obtained, in two cases, by the application of a weak solution of opium (two drops of the tincture to an ounce of water) to the eyes and nostrils.

28. ON SOFTENING OF THE STOMACH.
By PROFESSOR AUTENRIETH, and DR.
CAMERER.

Dr. Camerer, under the direction of Professor Autenrieth, (who may be considered as the real author) has published a thesis on the above subject, which we deem worthy of a short notice in our Journal.

In the first chapter, Dr. C. furnishes us with the symptomatology of the complaint, of which the most important items are, diarrhoea, vomiting, cough, and oppression of the breath, constant restlessness, peculiar expression of suffering in the countenance, perpetual crying and moaning, (in children) drawing up of the legs towards the belly, rapid emaciation, and, towards the end, convulsions, stupor, &c.—Finally, fever, more or less intense, inextinguishable thirst, and complete loss of appetite.]

The causes of this dangerous malady are investigated in the second chapter. It is well ascertained that softening of the stomach may take place, without any antecedent disease, and simply as a cadaveric change. In numerous experiments which the authors have made on animals, the great cul de sac of the stomach was found in a state of mollescence, the parietes dissolved and perforated, the extent of this disorganization being in proportion to the length of time that elapsed between death and dissection. But putrefaction did not appear to be at all connected with this change in the stomach. In all cases the stomach had been filled with food at the time of death, and, consequently, there had been an active secretion of the gastric juice, to the solvent properties of which our authors attribute the disorganization of the stomach. In animals who had died of disease, or after a long agony, this species of mollescence was never found—probably (our authors think) from the gastric juice having lost its solvent properties. That the succus gastricus is capable of dissolving the animal tissues, is proved by its action on the neighbouring parts, when perforation of the stomach and extravasation of its contents take place. In these cases, the gastric fluid is found to be of an extraordinary degree of acidity. The authors made some experiments with the liquid found in the stomach of two children dead of gelatinous mollescence of the stomach. A drachm of this fluid was introduced into the stomach of a man recently dead, and the stomach was kept in a temperature of about 50° of Fahr. for 12 hours, when the coats, as far as the peritoneal, were found completely dissolved, wherever the liquid came in contact with them. The same result was obtained in the stomach of a rabbit recently killed. Introduced into the stomach of a living animal, this juice had no effect. The solvent properties of the succus gastricus appear to our authors to be in direct proportion to its acidity—and the acetic acid seems to have the principal share in the mollescence, and in this conclusion the experimenters are corroborated by several others. They are of opinion, however, that this acid will not alone, how concentrated soever, dissolve the coats of a living stomach, unless that stomach be considerably below par in point of vital power. This fact they think they have proved by experiments made on the nerves leading to

the digestive organs. The par vagum and grand sympathetic nerves were divided, on both sides, in several animals, and the fluid extracted from the stomachs of children who had died of gastro-malacia (mollescence of the stomach) was introduced. In others, acetic acid was introduced, after section of the nerves—and in others still, there was nothing introduced after the nerves were cut. In those animals where the gastric fluids and the acetic acids were introduced, there was found an unequivocal dissolution of the coats of the stomach. The mere section of the nerves was not followed by any such appearance—or at least by very little.

The fourth chapter is dedicated to a consideration of the nature of the disease under review. They conclude that the stomach is enfeebled—almost paralyzed, in this malady, and that there is, moreover, an affection, of an inflammatory nature, of the par vagum. They have been led to this latter conclusion, 1mo. By frequently observing an unusual hardness of the pons varolii and medulla oblongata, on dissection of subjects dead of this disease, the other parts of the brain retaining their natural consistence: and, 2dly, by the almost invariable accompaniment of respiratory disorder in mollescence of the stomach. This inflammation of the pneumo-gastric nerves ends in paralysis of the same nerve, as shewn by cessation of vomiting and of diarrhoea, a little before death. But, as the vascular system is not proportionally impaired, as proved by the continuance of the febrile phenomena, the gastric juice continues to be secreted, and that of an extraordinary acidity, so as to be capable of dissolving the coats of the stomach, already in a weakened state.

Such is the theory (somewhat hypothetical, certainly,) which the authors believe to be conformable to, and supported by, facts. They have adduced 60 cases of this mollescence of the stomach, the greater number of which have been communicated by Dr. Jaeger, and many of them are very interesting. Although we cannot entirely subscribe to the views here taken of the cause of the disease, yet we think enough has been brought forward to prove that an affection of the nerves leading to the stomach may powerfully alter its functions—perhaps even its structure. Thus, melancholy emotions

of the mind lessen at once the vital powers of the stomach, through the medium of the nerves, at the very time when this derangement of function produces the most acrid state of the gastric secretions, which tend farther to annoy the organ that gave them birth. This opens out an immense field for practical observation independent of all hypothesis. The thesis of Dr. Camerer, and the views of his master, Professor Autenrieth, are deserving of much consideration.

29. CASE OF PERFORATION OF THE STOMACH. By CHARLES DAVIS, M. D.

On the first of January, 1828, Dr. Davis was called (in conjunction with Mr. R. Carmichael) to Margaret Browne, a servant of Mrs. Bourne's of Mount-joy Square, Dublin, whom they found labouring under symptoms indicating the action of some acrid poison. She complained of violent pain at the epigastrium, accompanied with retching and vomiting of frothy mucus. She had burning pain along the course of the œsophagus, and most distressing tension and exquisite tenderness of the abdomen. Her pulse was almost imperceptible at the wrist, and her cheeks, lips, and extremities, were cold and livid. She appeared to suffer extreme agony—complained of violent thirst—had hiccup occasionally—and the muscles of the face were agitated with spasmodic twitchings.

Satisfied by the assurances of the family, and the examination of the matters vomited, that her symptoms were not caused by poison; and having ascertained, from an attentive inspection of the abdomen, that neither gastric—hernia, nor any other species of protrusion existed, she was ordered a stimulating terebinthinate enema, and hot salt to be applied to the epigastrium, with bottles of warm water to the feet, but without any hope of advantage, as she was evidently moribund.

The following history of her case was obtained:—She was aged 22 years, of rather full habit, and brilliant complexion;—had hitherto presented the external appearance of good health, but was occasionally heard to complain of pain in the region of the stomach. On the preceding

evening, at 11 o'clock, she appeared in the best health and spirits. Shortly before 12, however, she experienced a slight return of the pain in the stomach, for which she bathed her feet.

At five on the following morning she was taken so ill, that the family apothecary was sent for, and he took some blood from her arm, while a bolus, composed of calomel, jalap and opium, was administered, to be followed by an aperient mixture. *She complained that the mixture spread over her belly and burned her inside.* She continued to grow worse until half-past 12 o'clock next day, at which time she was seen by Dr. Davis and Mr. Carmichael. She soon afterwards expired in convulsions.

Examination, 27 Hours after Death.

Putrefaction had already set in, to a considerable extent, accompanied with livid patches on the cheeks, abdomen, and thighs. The joints were rigid, and the tension of the abdomen, such as to expose its contents to considerable danger of injury from the knife in opening it. Air, and a turbid, yellowish fluid, were effused in considerable quantity, and the intestines were greatly distended with flatus. An oval opening was found in the stomach, through which the effused fluids had passed. The liver was considerably softened, so as to admit of being very readily broken by the finger.

The intestines were in every respect healthy, as were the peritoneum, spleen, pancreas, and pelvic viscera. The uterus was in a state of incipient menstruation.

The ulcerated opening was upon the anterior surface of the stomach, near its lesser curvature, and pretty nearly midway between its orifices. It seemed as if the coats had been punched out to the size of a sixpence. The edges of the aperture were somewhat thickened, and the peritoneal coat of the stomach, to a small extent around it, was slightly vascular. On the internal surface of the stomach, nearer to the pylorus, were two oval depressions, the edges of which were smoothed down, an appearance which ulcers usually present, when the ulcerative process has extended only through the mucous membrane. In other respects, this membrane was *softer and more pulpy than natural.*

In the great rapidity and violence of the symptoms, and in its fatality within

twelve hours from the first accession, this case resembles that published by Dr. Crampton, in the eighth volume of the Medico-Chirurgical Transactions, and most of those cases related by Mr. Travers, in the same work. It differs from them in the larger size of the ulcerated aperture, and in the total absence of any trace of inflammation of the peritoneal surface, excepting about the size of a crown piece, surrounding the perforations. This exemplifies the fact, that inflammation of serous membranes, when it proves fatal with rapidity, by an impression made upon the nervous system, may, when the inspection has been deferred for 24 hours, be totally undiscoverable.

The plumpness, and general appearance of the patient, was such as to lead the medical attendants to suppose chronic disease of the stomach one of the last affections she could labour under. From the first accession of the symptoms, she gave herself up, being firmly impressed with a conviction of the total inutility of medical assistance.

The stomach is amongst the preparations in the Museum of the Royal College of Surgeons.

30. OBSERVATIONS ON THE EFFECTS OF THE SUN'S RAYS ON THE HUMAN BODY. By JOHN DAVY, M. D. Physician to the Forces.—[Ed. Med. Chir. Trans.]

The sun has been called a universal tanner; and certainly his general action on the surfaces of human bodies, especially in hot climates, entitles him to this appellation. Dr. Davy thinks that the *modus operandi* of this embrowning process has not been hitherto investigated fully; and, therefore, he seems to have dedicated some of his leisure hours, at Corfe, to the inquiry. Having exposed his naked arm to the ardent gaze of an Ionian Apollo, for an hour and a half, on a hot day in July, Dr. D. found the effect to be an erythema, with pain, and ultimate desquamation of the cuticle, which desquamation continued, more or less, for nearly three weeks, leaving the skin in that brown state, in which it is commonly said to be "when tanned by the sun." This discoloration was not quite effaced at the end of seventeen months.

This being the case, Dr. D. considered himself justified in questioning the accuracy of Dr. Bostock's opinion, that the sun's action was exerted on the epidermis, "because we are informed that the tan of the skin is removed by blisters." Dr. D. observes that the skin, instead of being rendered fairer¹ is made browner by blisters. He concludes, therefore, that the seat of discoloration is in the surface of the cutis, and not the cuticle or rete mucosum. He has examined, with some attention, the cuticle of the negro, of people of colour, and of Europeans, who have become dark-brown from exposure to the sun between the Tropics:—and in each instance, when detached, the said cuticle has appeared much less coloured than the skin. He thinks that the colour, in all these instances, is owing to a kind of pigment deposited in minute particles or filaments, on the surface of the cutis, analogous to the pigmentum nigrum of the eye. Dr. D. doubts the existence of rete mucosum in any instance.

The cause of the solar browning—or rather the *modus operandi* of the solar rays in darkening the colour of the skin, is next entered on by our ingenious author; but we do not see much that is either conclusive or important in this part of his paper. The *consequences* of the discoloration of the skin are more important. Dr. Davy has verified the experiments published by Sir Everard Home in 1821, shewing that, when the skin is painted black, it is defended from the scorching effect of the sun's rays; but he is doubtful of the correctness of the inference thence drawn, that the black rete mucosum of the negro possesses the same protecting power. The cases, he thinks, are not parallel. In the one, the colouring matter is external to the insensible cuticle—in the other, internal. There are some facts, however, connected with this inquiry, which are interesting. Thus:—"when the sun's rays are concentrated by a lens, they penetrate, I find, through bone, as a portion of the cranium—through nine folds of black crape—and what is most extraordinary, through rolled platinum." This circumstance may help to explain the effect of the sun on the brain, in producing that malady commonly called *coup de soleil*. The result of some curious ex-

periments made by Dr. D. lead him to conclude that, although the colouring matter of the negro's skin affords some protection from the scorching effects of the solar beams, yet that it does not afford all the protection possessed by the negro. We have little doubt indeed that Provident Nature adapts the skin impressed by the sun's rays to bear them afterwards without inconvenience. But there appears to be other means than the mere colour of the skin. Perspiration is one—and there may be *internal* processes which tend to counteract the solar heat.

Whether there be a radical and primary difference between the organization of the African and European we need not now inquire; but we suspect that *habit*—that is, the continued operation of physical causes on the human constitution will account for all the varieties we find in man, when assisted by hereditary transmission.

The following extract is interesting:—

"Within the tropics, when on a journey, I have tried the temperature of my palenkeen bearers, just before setting out, when they were agreeably cool; and I have tried it again after three or four hours' exertion exposed to the sun, at a temperature between 80° and 90°; and I have found their temperature rather diminished than increased, as indicated by a thermometer, the bulb of which was placed under the tongue or in the axilla.* Whatever occasioned this reduction, or keeping down of animal heat, this I allude to as the internal means of counteracting external heat. However it is explained, (and it would not be difficult to offer a plausible explanation of it,) the fact seems to be curious; and if it is as new to others as it was novel to me, when I first made the observation, I need offer no apology for introducing it."

* "Observations which I made many years ago within the tropics, with some care, indicated, that moderate exercise raised the temperature of the internal parts of the body, as well as of the surface; and that severe and long continued exertion rather had a contrary effect, as in the instance above recorded."

31. HORÆ LACONICÆ.

No. I.

TO ARGUS were given 100 eyes; and his task was to watch a single living creature. How many organs of vision would he have required to watch the PRESS—that confluence of mighty rivers, which, collecting their innumerable tributary streams from every mountain, plain, and valley of literature and science, roll them in countless volumes towards the ocean of oblivion at last! A contemplative philosopher, standing on the banks of this rapid torrent, might amuse himself by calculating what proportion of its waters were expended in fertilizing the soil—what proportion fell into swamps and marshes, apparently for no other purpose than pollution of the air—and what proportion rolled on, unseen, and unheeded, to that vast reservoir, serving at once for its cradle and its grave! Some train of reflections, of this kind, must have been passing through the mind of an esteemed transatlantic cotemporary,* when he placed at the head of his periscope, a female figure winnowing corn, or, in other words, separating the grain from the chaff, with this motto underneath:—“*Utilia fideliter excrementum.*” There could not be a more appropriate head-piece to this department of his Journal. The task of Hercules, in cleansing the Augean stable, was nothing compared with the process of winnowing the medical journals of Europe and America. He had only to let in a river, and sweep the whole rubbish away—but the winnower must darken the air with chaff before he can collect a handful of grain.

Modern ingenuity, and the “march of intellect” were never so distinguished as in the art of adulterating *things* by means of *words*. Medical REPORTERS, in which we include all species of writers in the periodicals, seem to be as loth to come to the naked fact, as to the point of a naked sword. They are absolutely in a fever, lest the reader should too soon guess at what is ultimately to come out in the course of the paper. Many of the facts, indeed, when developed, are such as prove the writer to have had some degree of cunning, in keeping them so long

concealed in berviage;—but why those who have useful knowledge to impart, should labour to envelope it in obscurity by a profusion of unnecessary words, and thus curtail rather than extend its circulation, we never could divine.

We have been led into this train of reflection by the receipt of a packet from an old but unknown correspondent, LACON, (now of Albemarle Street) from whom we had not heard for some years, and therefore concluded him to be dead. He informs us that he has been immersed in the most profound studies, during the last five years, and that he has made a discovery of the greatest importance, especially to medical literature.

By means of an elaborate chemical, or rather alchymical process, he has constructed a metallic plate or TRACTOR, which he denominates a VERBIFUGE, and which, being drawn lightly over the pages of a book, immediately effaces all *unnecessary* words or sentences, leaving the efficient ones in insulated groups, which often, he says, present a very curious appearance, and one that would be most appalling to authors.

Apparent rari nantes in gurgite vasto!

Perceiving, at a glance, the vast importance of such a tractor to an analytical journalist, we offered a handsome sum for the annual use of the VERBIFUGE; but he would neither lend nor sell his tractor, though he promises to amuse himself by *deverbatising*, (as he expresses it) certain portions of medical literature, and sending us the nett proceeds. With this our readers, as well as ourselves, must be content.

It is interesting to learn, that LACON is now devising a text by which he hopes to distinguish truth from falsehood, a task which the TRACTOR does not pretend to perform—its office being simply that of a VERBIFUGE. We will venture, in a few instances, to append some remarks to the communications of LACON; but shall never interfere with his text.

VERBIFUGAL OPERATIONS.

1. *Subjects for Dissection.* Sir George Mackenzie has (he says) discovered the

* American Medical Recorder.

art of embalming, and has extended this useless art to a very useful purpose—"the preservation of subjects for dissection." The dead body being put into a cask, the vessel is to be filled with a composition made of one measure of molasses, one of salt, and 15 or 16 of water. The cask is then to be headed, and two small holes left open for the escape of air, and the introduction of liquid during 24 hours, when the apertures may be closed, and the cask forwarded to its destination. In this way, he has no doubt that subjects may be sent fresh (*sweet*, at all events) from the West Indies or the Coast of Africa, if the casks are kept tight. He has specimens that have been thus preserved four months. Dr. Christison corroborates this statement.

REM. This may prove a very important discovery, if true; and will do more to facilitate the study of anatomy than a committee of M. P.'s.

2. **Tetanus.** Mr. Alexander (of Liverpool) has lately stated a case of traumatic tetanus in a sailor, where, after amputating the finger that was wounded, thirty ounces of blood were taken from the arm, and then the following medicine exhibited:—

"R. Tabaci fol. 3j.

Aq. bullient. ℥iv.

Ft. infusum, capiat dimidium statim, et reliquium post horas tres."

The first dose nauseated the stomach, and produced some relief of the sternal pain. The second dose produced both vomiting and purging, with still greater relief. Two doses more, of the same strength, removed the emprosthotonus.

REM. The quantity of tobacco taken in this case, (two drachms in infusion) is so enormous, that there is some reason to doubt a typographical error. If the fact is as stated, then all that can be said is—"anceps remedium melius est quam nulum."

3. **Hydrophobia cured by Venesection.** LACON writes this heading with fear and trembling; yet the facts appear strong. A boy had been bitten by a dog, whose history could not be made out. Nearly four months elapsed, when unequivocal hydrophobia became developed. Dr. Charles Davis, of Dublin, and several other Medical gentlemen, saw the patient.

Bleeding, purging, blistering—or perhaps NATURE, dissipated the hydrophobic symptoms; but pneumonia unexpectedly terminated the boy's life on the 14th day after the accession of the hydrophobia. This was very unfortunate. The dissection shewed sufficient cause of death in the lungs; but no physical trace of the hydrophobia was discovered any where.

4. **Aneurism of the Temporal Artery.** Assistant Surgeon Bushe, M. D. is an adept in the noble art of amplification. It is to be hoped that, when he writes a system of surgery he will employ LACON to revise the manuscript—otherwise Fort Pitt will not hold the volumes. In three cases of temporal arteriotomy, aneurisms by anastomosis, formed, which resisted the usual means and ended in fungous bleeding tumours, that were removed by carrying incisions round their bases, and dissecting them away. In two of the cases, the artery had been completely divided but this did not prevent the aneurism from taking place. In all three, pressure was applied, and seemed to expedite the growth of the tumours, as well as excite constitutional irritation. In one case, a circular incision was made round the base of the tumour—but not carried to the bone, as recommended by Sir Astley Cooper—and this plan failed. How could it be expected to succeed, when the supply of blood from the deep-seated vessels was left undisturbed? The author comes to the conclusion, that excision is the only safe and radical cure—and that it should be performed as soon after the formation of the tumour as possible.

That species of aneurism (by far the most common) in which the trunk of the vessel is the seat of the dilatation, has never occurred, in Dr. B.'s practice, where proper pressure had been applied after arteriotomy, whether the vessel was cut across or not. He has cured this kind of aneurism lately by firm pressure with a coin, old linen, and a tight roller. Dr. B. is, no doubt, a good surgeon, a good anatomist—but not very laconic.

5. **Medical Remuneration.** Sir A. Carlisle has put forth, in the *Times* newspaper, a proposed scale of medical fees, not quite so chimerical as some of his recent speculations. But it won't do. If

practicable, it would be unjust—if just, it would be impracticable. The principle of the plan hinges on length of service, as in the army or navy—or rather on *seniority*.

Physicians.

"For every occasion of giving advice, or for visiting attendances, during the first five years of practice—fee, half a sovereign.

"For each of the same occasions after the first five years of practice, and until the end of twenty years from its commencement—one sovereign.

"After the experience of twenty years in continued practice, every physician is to be regarded as a referee, and when so employed in consultations, his fee to be two sovereigns, provided he does not assume the daily charge of the patient.

"Payments for journeys to remain as they now stand.

Surgeons' Fees.

"for each time of advice, attendance, or ministration, during the first five years—five shillings.

"After ten years of continued experience—half a sovereign.

"From the end of ten years one sovereign.

"For operations dangerous to life, a scale should be fixed, tending to repress unjustifiable enterprises. I think the plan of daily fees would prove the best security.

"Payments for journeys to remain as they now stand.

Apothecaries' Fees.

"All apothecaries who practise as sub-physicians, and hold the entire responsibility of treating patients, to be paid by fees, and the frequency of their visits to be at the discretion of their patients. It should be understood that those fees supersede charges for medicines.

"For each time of giving advice or attendance during the first five years of practice—half a crown.

"After five years and onward to ten years—fee five shillings.

"For ten years and onward—ten shillings."

REMARKS. There is one radical defect in this principle of remuneration, which vitiates it irrevocably. Sir A. seems to forget that man is, alas! doomed to *second* childhood; and therefore he has not taken into account the *decrement* of knowledge

which takes place towards the close of life, as regularly as the *increment* in the earlier stages. Thus, suppose a physician commences practice at the age of 26 years, which is soon enough; his services, at the age of 45, (the prime of his faculties,) would be only worth half the remuneration of a man at the age of 70 or 75! This objection applies, *a fortiori*, to surgeons. Sir A. must add a descending scale.

In respect to the GENERAL PRACTITIONER, the difficulty of arranging his remuneration is almost insurmountable. It has occupied the thoughts of the writer of these remarks for 20 years past, and he cannot see any effectual remedy for the evils which now exist. The patient complains of too much medicine being ordered, when the remuneration depends on the medicines; but he would complain of there being too little medicine, if the latter were to be included in the fee, according to Sir A.'s scale. If, on the other hand, the general practitioner abandons entirely the dispensing of medicine, and charges merely for his visits, he hazards a fearful experiment, and multiplies tenfold the profit of the chemist, whose influence is too preponderant already! In the present state of things, it will be the wisest policy of the GENERAL PRACTITIONER to persevere in the attainment of the best possible EDUCATION; and when he enters on practice, to devote himself, with all his energy, to the cultivation of his profession, not only by careful observation, but by unremitted study. We have no hesitation in saying that the great error of medical students is that of (comparatively speaking) abandoning study as soon as they have passed the "HALL." Yet this is the very period when real study should commence. Attendance on lectures, walking of hospitals, dissection of bodies, is not *study*. It is the mere imbibition of ideas from others—or rather it is learning the medical Alphabet. When the turmoil of lectures is over, then it is that the student should begin to digest the hurried meal which he has bolted down so expeditiously. Previously to this, he has not time to think, to read, to compare. If a young man is perceived to be *studious* when at home, and *observant* when visiting the sick, he will succeed in spite of all the bad laws and absurd system of

medical remuneration, by which he is surrounded. But if he trusts to dress, address, whist-parties, and scandal-bearing, he may loudly declaim against the laws, whilst the fault is nearer home!

We confidently predict (and we do not speak from light authority) that the system of medical apprenticeship will be done away in the early part of the next session of parliament. This will be one of the most important measures for liberalising and improving the medical profession, that has ever been put in execution. This apprenticeship is not merely a waste of five years, but it is the foundation of an illiterate and unscientific disposition through life. It is almost impossible that the education of the general practitioner can be complete, or his station in society so good as it ought to be while this mark of mechanical degradation is indented on parchment. No man should bind his son, for five years behind a counter, who does not intend him to remain there as a chemist, all his life. As the Apothecaries Company will, even now, admit five years' study, as an equivalent to five years' apprenticeship, (a great condescension certainly!) that man is mad, who would place his son under indenture, except on the express stipulation that he is to be free, after a year or two, to repair to the

proper marts for medical science and literature.

6. *Stricture Orificii Urethrae*. Newton discovered the law of gravitation by the fall of an apple—Mr. Earle, the cause of a number of troublesome complaints, by being "disturbed in the act of making water." This cause is a natural contraction, either immediately at the orifice of the urethra, or a very little way from the orifice, behind which contraction, the urethra is of its natural diameter. The effects of this contraction are very deleterious, producing all the symptoms of the worst strictures, and *strictures themselves*. Irritable bladder, disease of the prostate, chronic affection of the testicles (sclerocoele, or hydrocele) and great constitutional derangement, are the common consequences of this natural contraction of the orificium urethrae. These consequences are thought to be produced by the distention occasioned in the urethra from the check given to the current near the end of the passage. Mr Earle thinks it induces far more serious disease in the urinary organs, and their appendages than stricture at any other part of the urethra. The remedy is simple—a division of the contraction, by means of an instrument which this ingenious surgeon has invented, and with which he operates in Bartholomew's Hospital.

HOSPITAL PRACTICE.

82. FOUNDLING HOSPITAL. M. BARON, PHYSICIAN.

2. *Gastro-Enteritis of Infants*. Mr. Savatier reports from the above hospital on the subject of gastric and intestinal inflammation among newly born children. The following case is introduced from one of the wards of M. Baron, as an example of what the reporter denominates: "the first (slightest) degree of gastro-enteritis," in this class of subjects. On the 21st of April, was seen in the above ward, a child about six weeks old, presenting the following symptoms:—tension and general, though moderate heat of the abdomen—intense redness of the anus and vicinity—tongue red at the sides and tip, white at the back and middle

part—diarrhoea of greenish 'matters'—constant, and almost tetanic rigidity of the muscles about the back of the neck—countenance expressive of suffering. *Abstinence—fomentations to the abdomen—syrup of mallows with gum*. In ten days, the symptoms were all dispersed. Each day the tongue was observed to be less red, the belly less tense, the rigidity of the muscles above-mentioned less tetanic.

In the winter of 1824-5, M. Savatier states, that he attended a great number of children affected with convulsions. It was observed, that these children first shewed symptoms of disinclination for the breast; were very fretful; had the tongue red at the sides; the belly tense and hot; the anus red, with moderate

diarrhœa. Leeches, except in a very few cases, were not prescribed, on account of the prejudices against them. Fomentations, tepid baths, and diluents effected the cure, with abstinence from the breast.

We are inclined to agree with the reporter, who declaims against the "*MEDICINA PERTURBATRIX*" in such tender subjects. It is very true, that in such subjects, diseases make rapid progress—but it is equally true that they are easily counteracted by gentle means, and rapidly exasperated by irritating medicines, especially purgatives.

The reporter observes that there is a grade of gastro-enteritis in the newly-born, which is, perhaps, still *lighter* than the foregoing. M. Baron is accustomed to examine foundlings before they are sent off into the country, and often finds them presenting redness of the sides and tip of the tongue, with similar redness of the anus. When to these signs is added any tension of the abdomen, or diarrhœa, Dr. B. considers that there is inflammation of the mucous membrane of the stomach and bowels, and retains them for medical treatment. The reporter properly observes, that medical men should be in the habit of inspecting the tongues of children that are in health, otherwise they will not be able to properly appreciate the appearances in those who are ill. In children, unless the gastro-enteritis be very intense, it is rare to find the tongue dry. The state of the mucous membrane of the lips will often prove a guide in our diagnosis. M. Savatier thinks that the above slight grade of gastro-enteritis is caused by the sudden change from the *INTRA* to the *EXTRA-UTERINE* life. The action of the air itself, especially if cold, may induce this excitation of the mucous membranes, through sympathy with the skin, which is often but badly defended against aerial vicissitudes. Even the entrance of cold into the lungs, where the surface is sufficiently defended by cloathing, may prove the cause of inflammation of the mucous membrane of the bowels. In most cases, a few days sojourn at the Hospice, enables the physician to discharge the infants to the country to be nursed. In others, the phlegmasia makes progress, and the infant is taken to the infirmary of the Hospice, with the symp-

toms described in the above case, except the rigidity of the muscles.

The *second degree* of intensity of this affection among new-born children, is exemplified by the following case. A female child, eleven days old, was brought into the infirmary of the Hospice, on the 19th March, 1827, presenting the following symptoms:—diarrhœal discharge of yellow and watery matters—tongue red at the edges, and white on the surface—abdomen not apparently tense—heat of skin natural—little or no crying—pulse accelerated—thorax sounding well in all points. *Rice-water with gum—abstinence.* 20th and 21st. Continuance of diarrhœa—drink vomited—the abdomen somewhat hotter than the other parts of the body. *Fomentations to the abdomen.* Pulse still more accelerated. 22nd. Death, without any convulsions.

Dissection. The child was very robust in appearance. The lungs were extremely gorged with blood, and not crepitous in any part, but without mark of inflammation. The heart and large arteries were also much gorged, as were the veins. The mucous membrane of the stomach was of one uniform redness throughout, with arborisation of the vessels—mesenteric glands enlarged and inflamed—nothing particular in the small or large intestines, liver, or spleen.

The above case, the reporter observes, presents an exact representation of the symptoms and post-mortem appearances, in the second degree of infantile gastro-enteritic inflammation.

Third degree—or superacute form. Infants are frequently brought into the infirmary, who have been put to bed in the ward of the *CARCHE* the preceding night, apparently well; but who, nevertheless, are found dead the next morning. The reporter has examined many of these, and has invariably found the vessels of the gastro-intestinal mucous membrane extremely injected—often from the œsophagus to the rectum; but most commonly confined to the stomach, and the lower portion of colon. The redness is sometimes confined to the mucous membrane, but occasionally penetrates through the muscular and peritoneal tunics, which are of all shades, from a brown to a black hue. To this species of gastro-intestinal apoplexy is generally

joined a very acute degree of carditis, characterised by high vascular injection of the reflected portion of pericardium, and the coats of the great vessels, with effusion of serum in abundance. Still-born children have often presented these appearances. He was doubtful, at first, whether these phenomena might not be caused, or take place in the agonies of death; but attentive observation and reflection convince him, that they are the result of inflammation.—CLINIQUE.

In closing this short, but interesting notice, from the wards of M. Baron, we may remark, that tubercles are not unfrequently found in the lungs of the new-born children brought to the Hospice—proving that tubercular phthisis (or, at least, the seeds of that disease) may be congenital.

How is it that we have few or no reports—few or no investigations, from the wards of our numerous Lying-in charities in this metropolis? Do the medical officers keep the knowledge acquired by dissection in their own breasts, for the sake of raising themselves above their neighbours in pathological science—or are they too lazy, too busy, or too *sleepy*, after their *labours*, to plod in the dissecting room? None of these! Their zeal is generously and humanely directed to the cure of all these gastro-enterites of the new-born, by a course of active and polypharmic remedies which would astonish M. Le Docteur Baron and his disciple SAVATIER! Possibly these dissections of our Parisian brethren may open the eyes of London practitioners to the danger of pouring medicines on stomachs, such as we have here described.

33. FISTULA OF THE PAROTID DUCT AND GLAND.

[La Pitié.]

M. Mirault has published an extensive memoir on the process employed by M. Deguise, as modified by Beclard. The following case will exemplify the process in question.

Case. Auguste Gonoreau, aged 18, the clerk of a notary, lacerated his cheek by falling upon an iron stove. One of the upper screws penetrated the cheek, wounding the buccinator near the master, though it does not appear that it

reached the mouth. The wound healed rapidly, with the exception of a small fistula through which there was a discharge of a clear liquid, especially while he was eating. This showed that the stenosian duct had been wounded. After having fruitlessly employed the several processes which were directed by his attending surgeon, on the 21st of May, 1821, he placed himself under the charge of Beclard, in *l'Hôpital de la Pitié*. It had been three years since he had received the injury.

Beclard converted the fistula into a recent wound, by the excision of its sides; then with a small trochar he perforated the cheek from the wound, passing the instrument obliquely backwards. Having withdrawn the stilette through the canula which remained in the perforation, he passed the end of a leaden wire. Having withdrawn the canula, he in the same manner made a second puncture; beginning, however, within the mouth, about three lines anterior to the former puncture, carrying the point of the instrument obliquely, till it passed into the wound near the place where the wire was inserted. The external end of the wire was passed through this opening into the mouth, being thus bent somewhat in the form of the letter V. The ends of the wire were twisted together; and the external wound was closed by a needle and the twisted suture. For the first three days, there was some distention and pain, owing to the saliva's not passing at first very readily by the side of the leaden wire. On the fifth day, the saliva passed freely into the mouth, and the swelling was nearly gone; the external wound had united, and the needle was now removed. Still, the internal fistula was not so complete as to carry off all the saliva, while the patient was eating. The duct was distended into a kind of sac, producing, during his meals a small tumour, which was, however, easily emptied into the mouth, by a very slight external pressure. The leaden wire remained inside the cheek, till it fell out, in September, when the cure was complete.—*Archives Generales.*

34. PHLEBITIS.

[Hôpital de la Charité.]

There is certainly something peculiar in

inflammation of the venous tubes, whilst the generally fatal nature of the malady makes it one of considerable interest both to surgeon and physician.

It appears that pregnant women, or rather, women *after* parturition, are liable to inflammation of the veins of the uterus, the pelvis, or the thigh. The cases which have been lately brought forward by Dr. Davis, and some of his supporters, whilst they failed in establishing the Doctor's theory of the *phlebitic* origin of phlegmatia dolens, demonstrate in a conclusive manner, how frequent and how fatal an affection is inflammation of the femoral and iliac veins. A very similar case occurred to M. Fouquier, at the hospital of La Charité, and is reported in a recent number of the Clinique.

Case 1. A woman, about thirty years of age, was brought into the hospital on the tenth day of her confinement in a condition approaching to stupor, and incapable of making correct replies to the questions that were put to her. The pulse was rapid, the surface parched and of a cadaveric hue, the tongue coated with mucus, and rather dry. There was pain in the abdomen on pressure, and a circumscribed, round-shaped tumour in the pelvic basin; both the lower limbs were cedematous, and in the position of semi-flexion, any attempts at extending them occasioning acute pain. The respiration was natural, and the patient appeared to suffer little.

The pain in the abdomen and tumour in the pelvis led to the suspicion of peritonitis, complicated with inflammation of the uterus. Leeches to the abdomen, emollient drinks, and broths were ordered, but the symptoms became worse, the tongue was dry and brown—the teeth incrustated—the pulse innumerable rapid—the senses wandered—the patient lay continually on the side or belly, and on the 15th day after her admission she expired.

Dissection four and twenty hours after death. Traces of arachnitis were detected in the head, but nothing particular in the substance of the brain. A trifling quantity of bloody serum was discovered in the pleuræ: the lungs were not so crepitating as they should be, and on cutting into them a considerable quantity of yel-

low fluid, mixed with streaks of blood, flowed out. This engorgement of the lung was most perceptible on its posterior aspect. The mucous membrane of the stomach and intestines was unaffected, with the exception of some reddish patches of small extent upon the colon. The peritoneum was not at all inflamed, but the uterus was double its natural volume, pale in colour, soft in texture, and its inner surface coated with a layer of greyish pulpy matter. The vessels, though distinct, were empty, and the uterine and spermatic veins, being opened in their whole length, presented not a trace of inflammation.

The femoral vein and its divisions on either side were thickened, red on their internal coat, and filled with clots, which, in the upper part of the tubes especially, had purulent matter in their centre. The iliac veins were also reddened, coated within by a membranous layer of lymph, which extended to the inferior cava, and filled with a grey-coloured, bouillie-like fluid, which, above, was evidently sanious and diluted with the blood of the vena cava.

The reporter remarks upon the case, and we entirely agree with him, that phlebitis does not prove fatal, merely as an inflammation, but from its introducing a quantity of pus into the current of the circulation, to mix with and *poison* the constitution of the blood. Whoever has seen many cases of phlebitis, must be struck with the rapidity with which depression supervenes. The pulse, which, for a day or two, often not so long, was full and bounding, changes to a rapid, wiry, and feeble beat; the surface of the body at first grows pale and pinched, and latterly assumes a decided bilious tint; the pain, which, in the commencement was frequently severe, becomes either masked or lulled, the senses wander, and the patient dies delirious.

It is a curious fact but one which is well established, that abscesses and deposits of lymph in the structure of the lungs, which are not uncommon after surgical operations, almost always occur in a greater or less degree, in cases of phlebitis. How is the fact to be explained? Are we to imagine that a certain undefinable sympathy exists between the condition of the vein and the pulmonary apparatus, or adopt the humoral patho-

logy, and conclude that it depends on the vitiation of the fluid? We cannot help inclining towards the latter, for surely if the venous blood is altered by an admixture of pus and lymph, it cannot be in a proper condition to be carried into the delicate structure of the lungs, nor is it likely to prove harmless to that structure in its passage. Another circumstance that would seem to be in favour of the humoral doctrine is the fluidity of the blood after death, which is always remarked in phlebotic patients, and of which we detailed a very decided example in the 17th number of the Journal.

Granting, however, that it is the vitiation of the fluids which so rapidly prostrates the powers of life, still this vitiation is a secondary process, and the formation of pus and lymph are only the results of preceding inflammation. This being the case, it appears, that if more powerful depletion, and especially locally, were employed at the onset of the disease, we might have a more favourable prospect of arresting it in limine, and preventing the purulent effusion. Had we a case of inflammation of the saphena, or veins in the upper extremity, we should cover the limb with leeches, not as they are commonly employed, by twos or threes, a mere apology for blood-letting, but by forties! We should also be inclined to give a trial to the application of cold, especially above the part immediately inflamed, and, if the state of the limb admitted it, apply compression, in order to promote the deposition of coagulum, and formation of adhesion between the inflammation and the heart. General blood-letting should be cautiously employed, as the patient but seldom bears it well when the inflammation has gone beyond its earliest stages.

It is singular that inflammation of the femoral and iliac veins should be so frequent a consequence of child-birth; but this, at least, is evident from the case at the head of the report, that the affection of the vessels in question may occur without the slightest appearance of phlegmatia dolens. In the case it is merely observed, that the lower limbs were *œdematous*, and painful when extended, though the very essence of Dr. Davis' pathology of phlegmatia dolens, viz. inflammation of the crural veins, was there.

In a case recorded from St. George's Hospital in the Medical Gazette, a short while ago, there was inflammation of the crural vein as high as the profunda, and yet the limb was scarcely swollen, and had not the slightest character in common with phlegmatia dolens. We have always opposed the theory, and we doubt whether the Doctor himself would venture to maintain it now. It is laid in the tomb of all the Capulets, and we shall be loth again to rake up the ashes of the dead!

Case 2. A country girl, affected with white swelling in the knee-joint, suffered amputation of the thigh, on the 19th of May, at the Hospice de Perfectionnement. Two arteries only were tied at first, but at the end of an hour and a half, the dressing was completed and additional ligatures applied. The patient bore the operation badly, and was affected in the evening with flushing of the face, quick pulse, and vomiting. Blood was abstracted from the arm, but she passed a wretched night, suffering from cephalalgia, vomiting, and pain in the stump.

On the 20th she was worse; the tongue was dry and red, the thirst ardent, the vomiting incessant, the face was flushed, the surface of the body hot and parched. The dressings on the stump were stained with blood, and arterial looking blood made its way between the bandages. The bleeding from the arm was repeated, and leeches applied to the head, but without relief. Depression, both physical and moral, supervened—the skin grew pale—the countenance sunken and expressive of extreme anxiety—the tongue was dry and brown—the bowels obstinately costive. The pain in the stump was always great, and its surface white and sloughy. On the 26th delirium was established, and on the 27th, eight days after the performance of the operation the patient sank.

Dissection. The vessels of the pia mater were rather injected, and the cerebrum, when cut into, was studded with bloody spots. The heart and lungs were sound, but the pleura on the left side of the chest was covered with recent adhesions. In the neighbourhood of the valve of the colon, follicular ulcerations were observed, apparently advancing to cicatrization, but the rest of the abdominal viscera were sound.

On examining the stump, the periosteum was found to be loosened from the bone as high as the lesser trochanter. The femoral artery was filled at its extremity by a vermiform clot which adhered to the sides of the vessels, and extended into the cavity of the nearest collateral branch. Three inches of the femoral vein were filled with pus, but its tunics were unaltered in consistence. At the point which was in contact with the pus, the internal coat was paler than it should be, though above it was injected and the colour of the blood which it contained. This staining and discoloration extended to the iliac vein, and even to the cava.

We cannot but conclude, from the identity of symptoms with those of phlebitis, that the above was a case of inflammation of the femoral vein. It is singular that the coats of the vessel, which for full three inches was filled with pus, should have been so unaltered as they were.

In the cases related above, the inflammation was seated in the lower extremities, but in those which we are going to detail it followed venesection in the arm.

Case 3. A young woman, ætatis 22, of good constitution, and in the fifth month of utero-gestation, was bled in the arm at the Hospice de Perfectionnement, for oppression and pain in the left side of the thorax. Two days afterwards she returned with fever, swelling of the arm, especially around the puncture, and discoloration of the skin in the situation of the veins. Leeches were ordered, but not applied, and on the next day (the 14th Jan.) the swelling had increased. The limb was rolled from the finger to above the affected part, but the symptoms still persisted, and the pulse was 110 in the minute; poultices were applied, and on the 16th, five and twenty leeches placed upon the arm. The pain, &c. in the arm was in part relieved, but the cough grew worse, the tongue was red and dry, the pulse 120, excessive agitation. On the 18th, the opening made by the lancet was enlarged, and issue given to a quantity of bloody pus, when the swelling of the arm diminished. She now complained of pain behind the sternum, and 20 leeches were applied. The cough, however, continued troublesome—she suffered from a burning thirst, and though the inflam-

mation in the vein diminished, the pain in the sternum was unabated. *Twelve more leeches—blister to the chest.*

On the 26th, contractions of the uterus came on, and on the 26th, the poor young woman was in a dying state. The uterine contractions were still very powerful, and the neck of the uterus not dilating, M. J. Cloquet, divided it to the extent of a quarter of an inch, when the contractions of the organ were redoubled, and after a little while the patient was delivered of a child, which lived three hours. About this time the mother too expired.

Dissection. All the veins from the arm to the heart were inflamed, and filled with a greyish pus; the right ventricle itself presented marks of inflammation, and was filled with clots of blood and pus, which were also found in the pulmonary artery. The left lung was inflamed, and a tubercle existed in the right.

Another case of phlebitis after venesection is related in the Medical Gazette.

Case 4. An athletic young man, a "traveler," was admitted into St. George's Hospital, on the 18th of June, with general anasarca and a dry cough, for which he was ordered to be bled by Dr. Hewett. The bleeding was repeated, and on both occasions the blood was abstracted from the same opening in the median cephalic of the right side. On the 21st, he complained of pain and tenderness in the arm, which was evidently swollen. The lips of the puncture were adherent, the integuments around a little red, the pulse 112, rather full and easily compressed, the tongue white, the bowels costive. Sixteen leeches and afterwards a poultice were placed upon the arm, and the bowels opened by scammony and blue pill. A draught of aq. ammon. acet.—Potass. acet. ʒj. syrup aurantii ʒj. was also ordered every six hours.

Next day, a red streak was noticed running from the puncture downwards to the wrist, in the line of the cephalic vein, which was painful upon pressure. The bowels were freely opened, but he was troubled with a vomiting of green and bilious looking fluids. *Twelve leeches to the arm—magnes. ust. ʒj.—pule. tragac. c. ʒss.—liq. potas. ℥iij.—syr. alth. ʒij.—aq. menth. vir. ʒss.—t. opii ℥ij statim. et. o. h. repet. quamdiu perstet vomitus*

In the evening he was ordered calomel

and opium, but on the 23d the arm wore a most alarming aspect. A sero-purulent discharge was continually oozing from the lancet-wound—the fore-arm was swollen and tender to the touch—the arm was also tender as high as the insertion of the deltoid muscle—and red lines coursed upwards and downwards in the direction of the cephalic, the median cephalic, and median veins. The pulse was 96, and there was cough excited on taking a full inspiration. Mr. Rose was requested to see the case, and immediately enlarged the puncture, which gave issue to a mixture of serum, pus, and blood. The coats of the vessel were greatly thickened. The pain and tenderness of the arm were much relieved by the opening which was made, but in the course of the afternoon some hæmorrhage occurred, which returned during the night in considerable quantity, and was stopped by pressure.

On the 24th, all the symptoms were exasperated—the pulse innumerable rapid—the pain had disappeared—the body bloated and of a bilious tint—the senses wandering—the countenance expressive of intense anxiety. At 6, p. m. he died.

Dissection. A pint of discoloured serum in the right side of the chest, and extensive, but not very recent, adhesions; on the left side the same appearances in a less degree. The lower lobes of both the lungs, especially the right, were fleshy and consolidated, the mucous membrane of the bronchi and trachea was injected, the pericardium more filled with water than it should be. There was a general disposition to fluidity in the blood, and the lining of the left ventricle, as well as the inner coat of the thoracic and abdominal aorta, were stained of a cherry tint.

The median cephalic (in which the puncture had been made) was exceedingly thickened in its coats, and so was the cephalic trunk as high as the insertion of the deltoid. The inner coat of the cephalic was inflamed to within two inches and a half of its junction with the axillary, above which point no appearance of disease could be detected. Very little pus existed in the veins, but the cephalic trunk *below* the spot where the median cephalic joined it, was inflamed on its inner surface, and its cavity plugged up by coagulable lymph. No adhesion had been formed between the coats *above* the

puncture, so that there remained a free and unobstructed channel for the escape of the blood from the axillary trunk. The median basilic was thickened and inflamed, and the basilica itself showed feeble traces of inflammatory action. The cellular membrane around the brachial vessels was injected, though the vessels themselves were sound.

The reporter remarks upon the case, that “the thoracic inflammation, particularly on the right side, where it was most acute, we must suppose to be in part a sequence of the affection of the vein, as in the generality of cases of phlebitis after venesection, it has been found to have occurred. A patient was admitted into the hospital last year, who had swallowed oxalic acid, and he had nearly recovered from the effects of the poison, when he was ordered to be bled. Inflammation of the vein, (the median cephalic) supervened, and the patient died. On dissection, the cephalic vein was filled with pus and lymph, and marks of the most intense pleuritic inflammation were discovered in the side of the chest corresponding to the arm he had been bled in. In two of the cases recorded by Mr. Hodgson, the same appearance was observed; and in the instance of phlebitis of the thigh, reported in our last, the pleuræ were inflamed and abscesses forming in the lungs.”

• We believe that there is truth in the observations of the reporter, but still it is curious that the tables may be turned upon them. It has been remarked, and by no less an authority than Sir Astley Cooper, that inflammation of the veins in the arm after venesection is much more frequent when the patient is bled *for* thoracic inflammation, than for any other disease whatever. Whether the condition of the lungs and vein act and re-act upon each other is a point which we leave where we find it.

35. FRACTURE OF THE SPINE.

[St. George's Hospital.]

An interesting case of the above very melancholy accident was admitted a little while ago, under the care of Mr. Brodie.

Case. Michael Williams, ætatis 71, had been working on a hay-stack at Acton throughout the day, when he fell asleep,

and slipped from the stack upon the ground. He was taken up next morning, (26th of June,) and carried to the hospital, presenting the following symptoms.

No motion whatever in the limbs, excepting flexion and rotation of the left fore-arm. Sensation was destroyed in the lower extremities and in the trunk about as high as the 4th dorsal vertebra. It was lost too in the right arm below the elbow, and very imperfect above it; in the left arm there still remained some feeling, but it was considerably duller than it should be. The breathing was oppressed, and solely performed by the diaphragm, so that the ribs were depressed instead of elevated during inspiration. There was occasional priapism—surface rather cold—pulse small and feeble—senses perfectly collected.

On examining the spine no crepitus or displacement could be felt, but considerable pain was experienced on making pressure above the 5th dorsal vertebra. On introducing the catheter, about a pint of healthy urine was drawn off.

Mist. ætheris, c. mist. camph. āā ʒvj. 6tis horis.

Vespere. The pulse is 80, and rather stronger, breathing more laborious, and consisting of twenty-six respirations in the minute, the tongue, which in the morning was brown and dry, is rather moist.

27th, A.M. The breathing is still more laboured—pupils contracted—bowels not yet open—pulse 80—tongue loaded, but moist. On drawing off the urine, it tinged the litmus paper red. He continued sensible, but gradually sank, and died at 6, P.M.

Dissection. There was fracture of the spinous process of the 5th dorsal vertebra, and 6th cervical, but the principal injury was inflicted on the latter. The intervertebral cartilage, between the 5th and 6th cervical vertebrae, was torn across, so that about half an inch of the theca was exposed, and the articulating processes and bodies of the vertebrae were so widely separate, that the finger could be placed betwixt them. The theca vertebralis we have stated was exposed, but it was entire and unaffected, with the exception of a little ecchymosis. The medulla itself appeared to have escaped, but on cutting across it, opposite the seat of injury, its centre was of a brownish red,

as if a slight effusion had occurred from the minuter vessels.

Nothing particular was discovered in the brain, the thorax, or abdomen.

In a clinical lecture delivered on the case by Mr. Brodie, he remarked that symptoms of fracture of the spine may follow an extravasation of blood within the theca, which is gradually absorbed. A person, for instance, may become paraplegiac after an injury to the back, but in two or three weeks the paralysis is relieved, and he walks as well as ever.

In fractures of the vertebrae, the animal heat is frequently higher than the natural standard, the limbs appearing to be burning hot. In a case which occurred to Mr. Brodie, the thermometer placed between the scrotum and the thigh immediately rose to 111, and continued at that point, even after the patient's death. When the fracture is low in the cervical vertebrae, the pupils are generally contracted—the intellectual faculties, which were sound at first, become disordered, and the patient dies, in general, within the first three days, and often in twelve hours.

When the injury is lower in the back, the person may linger for a week or more, or even recover entirely, save that the limbs continue paralytic. An example of recovery occurred at the hospital last Summer, in the case of a little boy, who was admitted with fracture of the dorsal vertebrae, attended with evident displacement. Extension was employed, and the displacement diminished in a slight degree, but the boy was paralytic in his lower limbs. He remained in the hospital about four months, and, when he left it, his health was good, and the paralysis much relieved. Another instance of recovery occurred to a surgeon in the country.

A man was exposed to an injury of the spine; and, on examination, the practitioner discovered that the first of the lumbar vertebrae projected beyond the level of the last of the dorsal. The gentleman reduced the dislocation or displacement, whatever it might be, and a year after the accident, the patient was admitted into St. George's with paralysis of the lower extremities. He remained in the hospital a little time, and, when dismissed, the paralysis was considerably relieved.

With regard to the pathology of the

accident, if the patient dies within the first five days, the centre of the spinal marrow, opposite the seat of injury, is of the consistence of cream, and of a brownish colour. If, however, he survive for a month or two, the softening has proceeded to a greater extent, and the medulla, at the affected part, will float in water, and look as if entirely dissolved. The membranes of the medulla are by no means so frequently the seat of inflammation as the membranes of the brain.

Mr. Brodie made several remarks on the secretion of the urine, which deserve attention. In some cases, the majority, indeed, the urine is extremely ammoniacal, and deposits a quantity of ropy mucus, which, according to Mr. Brodie, will happen alike, whether the injury is high or low, whether the catheter is regularly employed or not. In other cases, the urine has an opaque and yellow hue, and acts as an acid on the litmus paper, a condition which may alternate with the ammoniacal on different days. When the urine has been ammoniacal, the mucous membrane of the bladder is found to be inflamed, and its vessels filled with blood, when, on the other hand, the urine has been acid, the vessels are actually empty, and the mucous membrane of the bladder preternaturally yellow, and *died*, as it were, by the yellow urine. In some instances, no change whatever of the mucous membrane is discovered. The same appearances are noticed in the lining membrane of the kidneys, which are generally unnaturally soft, especially when the urine has been ammoniacal.

Mr. Brodie regretted that so little could be effected by the surgeon in the treatment of the injury. If there was displacement of the bones, he would reduce it, as the reduction was followed by relief in the cases of the man and the boy, which are alluded to above. Abstraction of blood, if the symptoms should indicate inflammatory action—the horizontal posture—purgation, when the bowels are confined, and the regular employment of the catheter, are all that Mr. Brodie can suggest. To trephining Mr. B. is decidedly opposed on the ground that he never saw a case where the operation could have possibly done good. If only the arch of the vertebra is driven in upon the marrow, we might suppose the trephine would be of service; such an accident,

however, must be extremely rare, and, even if it did occur, it would be impossible for the surgeon to distinguish it from that in which the body of the vertebra is broken also.

Some other objections to the operation were urged by Mr. Brodie, but none were so strong as the above.

36. SIMPLE FRACTURE OF THE TIBIA, SAID TO BE FOLLOWED BY DELIRIUM TREMENS.

[Guy's Hospital.]

We know not how it is, but we are weekly cannonaded with cases of delirium tremens, as a consequence of injuries, in the *East-end* hospitals. Whether it be that the *gentlemen* received in those establishments are gifted by Nature, or endowed by gin and bitters with a strong predisposition to the affection in question; or whether, on the other hand, the gentlemen who report have a happy facility of seeing and discovering what their neighbours would not, is a point which may admit of disputation. For our own parts, we confess that we never saw an instance of DELIRIUM TREMENS, or any thing approaching to it, as an unequivocal consequence of injury, although we have been witnesses of dislocations and fractures in abundance! We have seen delirium after accidents, (and who has not?) but it was only a symptom of the general shock which the system had received, and we should no more have dreamed of considering or calling it delirium tremens, than we should have conceived the idea of christening it the chicken-pox. The delirium traumaticum of Baron Dupuytren is not delirium tremens, as it was by no means confined to individuals in the habit of drinking.

Case. A man, ætatis 42, who had for many years been given to drinking hard, and "was often in the habit of walking in the night in a state of delirium" (!) was received into the hospital, on the 20th of June, under the care of Mr. Morgan, in consequence of a simple fracture of the tibia, situated "about three inches above the tibio-tarsal articulation," *Anglice*, the ankle-joint. The tongue was furred—the pulse small and frequent—the aspect pallid—the eyes were "quick and bright"—the pupils much contracted.

The fracture was reduced, the limb being put in splints, and placed upon the heel.

On the 21st he was hot, feverish, and so "furiously delirious," as to rise from bed and walk with the splints about his leg. There was tightness in the head—small quick pulse—furred tongue—contracted pupil. The countenance was flushed, and he was extremely tremulous, and constantly muttering to himself. He was ordered two ounces of julep of ammonia, with four drops of the liquor opii sedativus every four hours. The delirium continued, but diminished in intensity—the quickness of the pulse subsided, and the tongue grew clean. Twenty minims of the tincture of hops were added on the 26th, to every dose of the medicine before prescribed; and on the 30th, the delirium had left him, the febrile excitement was gone, and the leg was doing well.—*Lancet*.

The delirium which followed the accident (give it what name we may) was certainly peculiar in its characters. It would seem by the report that the patient was previously affected with it, at least he was "in the habit of walking in a state of delirium in the night," a circumstance which renders it very difficult to determine how much of the affection depended on the injury.

37. ON EXCISION OF THE VAS DEFERENS AS A SUBSTITUTE FOR CASTRATION.

It appears that Mr. Key has performed the above operation, in an instance of disease in the testicle, which had resisted every other kind of treatment. The effects of the operation are not detailed, and we venture to pronounce that it never will succeed. We cannot conceive, in the remotest degree, what the principle of the measure can be; nay, we will go so far as to say, that it is in absolute defiance of principle of all kind.

Would the stoppage of the ureter be likely to cure or to cause a disease of the kidney? The answer is easy enough. Look to what organ of the body we may, it invariably happens that disorder or disease of the secreting apparatus is produced, if the excretory duct is choked up or obliterated. The surface of the body, the mucous, and salivary glands, the gall-

bladder, the bladder for urine—in short, every organ or part which is either secreting in itself or acting as a reservoir for the secretions of other parts, must furnish an illustration of the truth of our remark.

If the testicle continues so sound as to secrete, we question, in the first place, whether any operation is required, (except in particular cases,) and, in the next, we maintain, that the effect of the excision of the excretory tube must inevitably be the accumulation and distension in the testis or epididymis, a condition, we should think, that would rather bring on a disease than relieve it. If the testicle is disorganized and so utterly *hors de combat*, as not to secrete any longer, the accumulation of course will be prevented, but then the vas deferens has lost the connexion of function with the testicle; it has ceased to be an excretory tube, for the palpable reason that there is nothing to excrete, and the expectation of removing a disease in the one by excision of the other, would be as chimerical a notion and futile a whim as was ever engendered in a crazed imagination.

We are told that the operation has already been successful in Germany, but we do not believe it. The operation has been done, and the patient very probably got well; but when we bear in memory the absolute ignorance of the diagnosis of diseases of the testicle which prevails upon the Continent, and too often in this country also, we receive every statement of the kind with even more than a granum salis!

It appears that Mr. Lambert, the reporter for the Borough that *was*,* has instituted a series of experiments on the subject, "which have attracted much attention," though, in our ignorance, we had never even heard of them. They are, no doubt, conclusive on the point, and will fell to the ground "with the powers of an Afrite," the arguments we have brought forward against the operation. However, we submit with resignation to the castigation we shall certainly receive, for presuming to array common sense against the important and attracting experiments of so clever a person as the Reporter for the Borough!

* *Fuit Ilium.*

38. REMARKABLE CASE OF NEURALGIA. By Mr. DOD.

Among the numerous suggestions that have been transmitted to us respecting the distressing case of neuralgia, published in the present Number of this Journal, there is a case related by Mr. Dod, late of Bath, and now of Caroline Street, Bedford Square, which we deem it a duty to communicate to the public, and that in the words of the communicant.

"The distressing case of neuralgia inserted for consultation in a recent fasciculus of the Medico-Chirurgical Review, induces me to communicate some particulars of a most inveterate case of this complaint, which occurred in the person of an officer, who had been most dreadfully lacerated by a tiger in the East Indies.

"The patient was a Lieutenant Saunders, (now Captain) of the East India Company's Service, about 38 or 40 years of age. This gentleman after having resided in India about eight or nine years, was recommended to return to England on account of a liver-complaint, the sequela of a *jungle fever* he caught during some military operations in which he had been engaged in the country. After a short residence in England, his health being restored, he again returned to India. Upon his return, and during some part of the Poona war, in which he was conspicuously engaged, he one day incautiously approached a tiger, which sprang at him, seized him, and lacerated him in a most dreadful manner, destroying with its claws almost all the pectoral muscle, and other motors of the humerus, of the left arm. The tiger having left him, he lay in this mangled condition for a considerable time before assistance could be procured, during which interval he bled profusely. He recovered from his wounds; but there supervened one of the most distressing neuralgic affections of the body that can well be imagined. He became afflicted with violent head-achs, which increased to such a degree of severity, as sometimes to deprive him of reason. Coupled with these distressing head-achs, there was great pain in the lacerated parts, with subsultus of the muscles and tendons, which frequently extended to those of the body, giving to

the spectator the idea or appearance of its being an epileptic fit with which the patient had been seized. His digestive organs were much disordered, and his food in general disagreed with him. When his stomach was most out of order, all his sufferings were exasperated. These distressing complaints continued to increase in severity from the time of the accident until I saw him, about two years ago, at Truro, to the neighbourhood of which place he had retired to pass the remainder of his miserable life, after having sought relief from some of the most eminent of the faculty in London and other parts of this country. When I saw Mr. S. he exhibited a most distressing spectacle;—His body was emaciated—his countenance was pale—his lips blanched—and his features shrunk. The functions of his digestive organs were much disordered. His extremities were, in general, cold; and his pulse, which was small, beat about 120 strokes in a minute. When paying my second visit to him, I had an opportunity of witnessing one of those nervous seizures above mentioned, and of noting its progress. The subsultus commenced in the muscles of the lacerated arm; then extended to the eyes and muscles of the face; and, lastly, over the whole body. Some of the muscles seemed in a spastic state, whilst others were in a state of subsultus. He did not struggle! In this condition he remained about ten minutes, and then gradually recovered. On the preceding night, he had suffered severe pain in the lacerated parts, with violent head-ach; the latter symptom continued after the seizure. Although the subsultus frequently took place in the lacerated parts, yet it did not always extend to the body.

"I prescribed the following medicines, which had proved successful in a severe case of neuralgia a few years before.

"℞. Extract. colocynth. comp.—extr. jalap.—extr. alois. spicat. āā ℥ij. Mass. pilul. hydrarg. ℥j. Contunde et divide in pilulas xxx equales.

"Capiat decoct. sarsapar. simp. lbj. quotidie.

"Balneum calidum 3tio vel 2ndo die.

"I ordered him to take one, two, or three of the pills *every night going to bed*, so as to produce, the next day, two or three evacuations from the bowels. The sarsaparilla he took regularly every day,

but the warm bath was not attended to so regularly as I could have wished.

"These were the *only* medicines and means made use of, until my patient perfectly recovered, which he did in *twelve weeks* from the time I first saw him. He embarked the following spring for India, and has continued in good health up to the last accounts I heard of him.

39. MEDICAL DOCTRINES.

M. Cayol, who recently succeeded M. Chomel in the medical *CLINIQUE* of LA CHARITÉ, has been amusing the Parisian students excessively by the *novelty* of the doctrines which he has broached. He bewails, in strong terms, the infatuation of his countrymen, who have been led away from the Hippocratic observation of Nature and of symptoms by the ignis fatuus of pathological anatomy! He anathematizes those narrow-minded theories which can see nothing but IRRITATION, that fantastic and perverse being, pervading our various organs, and producing all diseases. He conjures the students to seek for nothing more in morbid anatomy than a knowledge of the means by which diseases have ultimately triumphed over nature and art. He tells them, and tells them truly, that they need not expect to discover the *essence* of maladies in the changes of structure which these maladies leave in the dead body.

M. Cayol has enunciated some ideas respecting acute diseases, which are by no means chimerical—many of them, indeed, are such as the most philosophic physicians still entertain.

He observes that nothing is more curious than the great number of characters or phenomena which are *common* to acute diseases in general. It is from these common characters that we are to draw our indications of cure—not from the local organic changes which only take place at certain epochs of the original disease. Look at pneumonia, pleurisy, fever—indeed at the majority of acute disease, and trace their causes. You will find what Hippocrates long ago observed, that they are generally attributable to noxious atmospheric impressions, that have disturbed the functions of our organs. But this is not the most remarkable circumstance respecting acute

diseases. If we watch their invasion, development, progress, form, and seat, even their termination, we shall find but one continuous struggle of Nature against a morbid cause.

First, we have more or less of horripilation, chilliness, malaise, oppression, recoil of the fluids from the surface to the interior, all which denote the impression of a morbid principle. Next, we have restlessness, elevation of the pulse, heat, &c.—in short, the phenomena of *re-action*, which is neither more nor less than an effort of Nature to drive this morbid principle or cause to some point or other of the body. It is then, *and then only*, that the weakest organ becomes the local habitation or *seat* of the malady. Thus, then, we see, contrary to the prevailing opinion of the present day, that all *local* affections are first *general* affections, and that their localization is the result of Nature's effort to disembarass herself of an enemy that threatens life. Thus a pneumonia, for example, is only the *crisis*, that is, the misplaced or unfortunate *localization* of a general disorder, resulting from a morbid impression on the system.* From these premises it follows, that the physician should be cautious how he interferes rashly during the period of invasion—and even during re-action. "His office, in fact, does not fully commence till the moment when the *morbid localization* becomes established." Till then he should, at most, only aid Nature in the way which she may indicate. When the local malady has manifested itself, the physician should be aware that Nature is still the grand agent, and that her efforts should not be rudely crossed or counteracted. On the contrary, he should

* There is much foundation for this assertion. Thus a man is exposed to wet and cold on the top of a coach, and next day he begins to feel all the phenomena of invasion, as above described. Re-action takes place, and, in short, the symptoms of fever are observed *before* there is any affection of the lungs. Is it reasonable, is it philosophic, to call this fever the mere symptomatic fever resulting from the local inflammation in the lungs—a topical affection that shews itself posterior to the phenomena of general fever? We think not.

diligently watch her movements, and endeavour to facilitate her operations, rather than attempt to take the work entirely out of her hands, as too many "bold practitioners" do, to the cost of the patient!

In these days of heroic remedies, the foregoing lecture from a disciple of Hippocrates may not be entirely useless.

40. CASE OF DISEASE OF THE HEART. By J. H. WISHART, F.R.S.E.

[Ed. Med. Chir. Trans. Vol. III.]

A married woman, aged 28, came under the author's observations on the 28th March, 1828, affected with palpitation of the heart of several years' duration.

"The pulsation is very irregular and intermitting; it is not confined to the natural situation between the sixth and seventh ribs, but it may be felt nearly as high as the clavicle on the left side of the sternum. The beat is so strong, that it is often heard by her attendants; and, on approaching the ear, the sound is very loud. She has a constant, severe tickling cough, with great anxiety and hurried breathing; the jugular veins have a distinct undulatory motion. The pulse at the wrist is so feeble and irregular, that it can scarcely be numbered. Her chest is very much emaciated, and the mammae shrunk. The lower extremities are œdematous; the swelling extends up to the pelvis, and there appears also to be slight effusion in the abdomen, but no fluctuation. Urine very scanty and high coloured; bowels open; appetite natural; considerable thirst." The complaint had lasted about seven years, during which she has been unable to walk quick or go up stairs without inducing violent palpitation. Some aperient and diuretic medicines were prescribed, as she would not submit to bleeding. In a few days the whole body became tinged of a yellow colour. There was no enlargement of the liver. There was, from this time, a rapid aggravation of the symptoms. The œdema of the extremities increased—the surface became shining—"and the yellowness of the whole body increased to a greater pitch than I had ever seen it." She expired on the 18th April.

Dissection. On opening the thorax, the

pericardium and heart were found to occupy the space between the second and eighth ribs, but more inclined towards the right side than usual. The lungs were healthy—twelve ounces of serum in the pleural cavities—six ounces in the pericardium. The heart was tinged of a yellow colour, and was rather enlarged in size. There was a large polypous concretion in the right ventricle, extending into the auricle, and firmly adhering to the columnæ carneæ. The parietes of the left ventricle were slightly hypertrophied. The mitral valves were cartilaginous, and the orifice so contracted, as scarcely to admit the point of the little finger. The opening of the aorta appeared quite closed by a caruncular excrescence, with fringed edges, which projected into the ventricle. The left auricle was much distended, and filled with a fleshy concretion, mixed with blood. The venæ cavæ were larger than natural. There was some dark-coloured serum in the abdomen—right lobe of the liver enlarged, and its surface covered with white tubercles, of the size of peas—similar tubercles were found throughout the substance of the organ—gall-bladder collapsed—ductus communis impervious.

The pulsation of the jugular veins, in this case, is ascribed by Mr. Wishart to the polypous concretion found in the right ventricle. The great action of the heart, as compared with the feeble pulse at the wrists, is satisfactorily accounted for by the state of the semilunar valves of the aorta. In the above case, there must, of course, have been a regurgitation of blood from the left ventricle into the left auricle, as the auriculo-ventricular opening could not be closed by the indurated mitral valve. This caused the whizzing sound which was heard. But this regurgitation acted also on the pulmonary veins, in which (could they have been seen) there would have been found a retrograde pulsation, the same as in the jugulars. This accounts for the cough and dyspnoea, the circulation through the lungs being greatly retarded. It is unusual to find so much valvular disease at the age of 28 years. The closure of the ductus communis hepaticus is not accounted for. We believe, from what we see and read, that diseases of the heart are still on the increase! We attributed their frequency, thirty years

ago to "the storms of the revolution." Now we have only the "piping times of peace" to accuse. But, alas! the heart of man, and of woman too, is much more frequently ruffled by the breeze of domestic trouble, than by hurricanes of political events. Even in those fearful "storms of the revolution," it was the *domestic* affliction that broke the human heart.

41. BREATHING OF COOL AIR IN PULMONARY DISEASE.

Dr. Drake of New York, in a letter to Dr. Smith, of Philadelphia, has offered some curious speculations as well as results of experience in the treatment of pulmonary diseases. The plan which Dr. D. employs, and his reasons for the adoption of it will be gathered from the following extract:—

"It consists in causing the patient to breathe *cool air*, while the cutaneous surface is maintained in a state of preternatural excitement, by placing him warm in bed or by enveloping his thorax with some stimulant application. I was led to the adoption of this means, by reflecting on the laws of sympathy, as inculcated by M. Broussais. That eminent physician contends, as you well know, that the sympathies between the skin, and mucous membrane of the *primæ viæ* are direct—that the stimulations of the one are directly repeated in the other; and he hence disapproves of the employment of blisters and other irritating applications to the abdomen, in gastritis, enteritis, &c. On the other hand, he says, that the sympathies between the skin and the mucous membrane of the lungs are reversed—whatever debilitates the former, and repels the blood from its texture, tends to irritate the latter, and produce a sanguineous congestion in the pulmonary organ, a preliminary condition of inflammation. If such be the case, one would naturally suppose that a rational mode of treating pulmonary inflammation would be to place the system, as far as possible, in a condition the reverse of that which has produced the disease. I have accordingly submitted the plan to actual trial in a number of cases in the state prison of this city, and the beneficial effects that I have uniformly

obtained, render me somewhat sanguine of the value of the remedy. I do not believe that it can be solely depended upon in the treatment of acute inflammations, but, conjoined with other antiphlogistic means, it may become a powerful auxiliary. Neither do I expect it it will prove a remedy for phthisis pulmonalis; for by the time the disease commonly receives this fatal appellation, the pulmonary tissue is so deeply altered and ruined, as to place the disease, in very many cases, beyond the control of medical agents; but I think it will be found to be of signal service in the early stages of these chronic inflammations. Surely, by creating a general revulsion to the external parts of the system, by means of external heat or other stimuli, and at the same time directly introducing into the inflamed lungs cold, which by its sedative properties is so efficient in allaying inflammatory irritation, and repelling the preternatural flow of blood from inflamed parts, we place the pulmonary organ in a condition well calculated to enable it to throw off the morbid action, and regain its healthy tone and functions. But facts are doubtless better than reasonings on this subject, and I will proceed to relate to you the way in which I submitted my patients to a trial of the remedy, and the results I have obtained from it.

"In order to excite and maintain the action on the surface of the body, the chest was enveloped in a vest padded with wool and lined with fur, and the patient covered warm in bed, or he was placed in a bath heated to 98°, and in this situation caused to inspire, through a tube, cool air brought from the external atmosphere, when the weather was sufficiently cold; otherwise, drawn from a reservoir in which it was cooled to about 40° of temperature, by means of ice. The operation was usually directed to be continued one hour, and repeated thrice a day; but the patients were frequently induced, from the benefit they thought they derived from it, to continue it much longer and to repeat it more frequently. They did not seem to receive any greater advantages from the warm bath than from the other mode of exciting external heat, and as its use was attended with much inconvenience, I have of late seldom employed it. The uncommon mildness of the past winter, prevented me from

using air lower than 28° of temperature, which of course was raised a few degrees higher by the time it reached the mouth. None of the patients complained of such air being too cold. I found that when its temperature was not higher than 50° , it seemed to make a decided impression, and that about 40° is the temperature that answers the desired purpose very well. I have accordingly of late brought the air to that point; and, from many trials, have no doubt that from four to six quarts of ice, even in summer, will cool a sufficient quantity for a day's consumption.

"It is, I think, during the hot season, when the skin is constantly kept in an excited state, and the other secretory organs are in full play, that the remedy promises to be of more advantage in chronic inflammations than it can possibly be during the cold and variable weather of winter.

"The sensible effects produced by the remedy were tolerably uniform. When the temperature of the inspired air was not above 50° , it invariably produced an agreeable sensation of coolness in the chest, occasionally with darting pains extending to the shoulders, which the patients referred to the external and muscular parts. On persisting in the use of the remedy for a long time and repeating it frequently, they sometimes complained of a sense of soreness and fatigue in the direction of the diaphragm, and sometimes also of fulness of the head and vertigo. The most constant effect on the pulse was to render it fuller: when it was preternaturally frequent, it commonly rendered it slower; in some instances diminishing it ten to twenty pulsations in a minute; in a few cases, however, especially where it was rather slow, it rendered it somewhat more frequent. It very generally mitigated the cough, diminishing its frequency more than one half in the course of two or three days, and rendered the expectation freer and easier, so that the patient would frequently throw it up almost without effort. The effects on the cutaneous function were not less decided: it diminished the morbid heat, and rendered the skin more pliable and pleasant to the feel. The patients that used the remedy to any extent complained continually of great hunger, and

it was with difficulty that I restrained them to a moderate allowance of vegetable food.

"Heretofore, in order to give the remedy a fair trial, I have employed it unaided by other means than the observance of low diet, and the benefits resulting have been too uniform and decided to be merely accidental. In one recent case of catarrh, it completely removed the affection in twenty-four hours. In all the old pulmonary cases it has greatly alleviated the disease; and notwithstanding the unfavourable circumstances under which these patients are placed it still seems to be rendering them service. In one case where the cough was almost incessant, I succeeded, in a few days, in allaying it so much as to enable the patient to sleep quietly all night, and his cough is now comparatively rare and trifling. In two cases of asthma, of many years' standing, the patient acknowledged that the remedy had afforded them more relief than any other means they had employed. The fulness of the pulse, the muscular pains, and the affection of the head, appear to indicate that the blood is diverted from the thoracic organ, and accumulated in other parts of the body. If such be the case, small and repeated venesections would render the effects of the revulsion from the lungs more permanent, and materially aid in removing the chronic engorgements.

"Dr. Binsse, the resident physician of the prison, has attended to the administration of the remedy, and taken copious notes of the progress of the cases, which I shall at some future day condense for publication.

"In my next letter I will describe the refrigerator and the other parts of the apparatus, that I have contrived, for the application of this new remedial agent."—*American Journ. of the Med. Sciences.*

42. ON PUERPERAL CONVULSIONS. By W. MICHELL, Esq.

From a short chapter on this important subject, which we find in Mr. Michell's little work on the ergot of rye, we shall select some practical observations that may prove serviceable to our obstetric brethren. The investigation of puerperal convulsions has been sadly neglected, Mr. Michell observes,

in this country. "For any tolerable account of the disease, such even as any accoucheur in extensive practice could furnish, we are almost entirely indebted to foreigners." The French have given us two of the best treatises on this subject—one by Chaussier, and the other by Miguel.

"We very seldom find a true puerperal convulsion until the last months of gestation, or until the os uteri begins to dilate, or the neck to be lost in the general distension of the organ. What we observe before this period, is not puerperal convulsion, but spasmodic attacks from the pressure of the uterus on any diseased or irritable part, or from the action of the fœtus in utero on its first motion. These convulsions, or rather spasms, end in faintness, whereas the puerperal convulsions end their paroxysms with great irritability. Constant moving and shifting the situation, the carotid throbbing, stertorous breathing, with a small pulse, are the marked and dangerous termination of such paroxysms. If the attack subsides, we find after delivery, in cases of this sort, great prostration of strength. With regard to the buffy appearance of the blood in these convulsions, it is not greater than at other periods of gestation, nor even so great after the delivery has taken place. The blood assumes the buffy coat whenever any one organ is gorged with blood, to the loss of other parts of the system. We find this appearance in a very great degree in persons addicted to spirituous liquors, although there be no disease except the engorgement of the liver. In fact, in excessive circulation of any sort, attended with engorgement, we find this to be the case; but where there is no engorgement, though the circulation be quick, but not carried on with a great action, or more strictly speaking, with a strong arterial contraction, the blood does not assume this appearance. The buffy coat then, I consider, does not depend entirely on inflammation, or obstruction of the blood through any particular part, but on an excessive engorgement of a particular part, or on an imperfect circulation; otherwise we should not find, as is generally the case, that the buffy appearance does not exist in the first portion of the blood extracted on any occasion.

"From these considerations, we may learn not to be deceived by the buffy ap-

pearance of the blood in cases of convulsions. We must not attribute it to inflammation, and continue to abstract blood until the buffy coat ceases to appear, but we should rather excite the uterus to action by any means that we have in our power. While uterine action continues, the convulsions will entirely disappear. I would, therefore, earnestly recommend every practitioner not to delay the delivery until serious affusion or sanguineous apoplexy has taken place—then it will be too late to remedy the evil. I would, without hesitation, apply all the means in our power, and not leave the patient until I had been successful in my endeavours." 6.

An interesting case is related of a woman to whom Mr. Michell was called, at 3 o'clock, and whom he found held by two women.

"After a few minutes she became calm, and talked rationally, complaining of violent pain in the head, as though it were splitting. When the pains came on, she said the fits presently succeeded, and the pains ceased. In a few minutes a pain came on, as if it would be expulsive; but almost instantaneously the convulsion followed, which put an end to it. I examined and found the os uteri partially dilated, about the size of a shilling; I kept the finger applied until the pain came on, when I found the os uteri dilate for a moment; the convulsions again came on, and from the spasmodic twistings, I was unable to keep the finger applied to the os internum. I then considered it right to bleed her largely; but finding her a weak woman, I pursued a different treatment.

"After giving her antispasmodics she appeared much the same. When the convulsions subsided she appeared lost for a moment, and breathed sonorously, with extreme lassitude. At 7 o'clock I made up my mind to turn the child, as I had often found that by bringing on a right action in the uterus, the convulsions may be stopped. This I effected in a few minutes; but as soon as I dilated the os uteri, the convulsions returned in all their hideous form. I continued—dilated—and delivered the child. During the paroxysm, as I was taking away the after-birth, the mother cried out that the child was coming, being perfectly igno-

rant of its birth; and even when it was shown her, and she heard it cry, she could scarcely be induced to believe it her own child. The convulsions still continued with longer intervals. I gave her \mathfrak{D} l of musk, to be doubled every paroxysm until they ceased. Three doses I have invariably found to overcome the complaint." 8.

It has been asserted, says Mr. Michell, that puerperal convulsions come on without any determination of blood to the head. This he conceives to be a mistake. On the contrary, he considers it to be one of the marked distinctions of puerperal convulsion.

"We frequently meet with convulsive spasms of the legs, from cramp, or pressure on the nerves of the lower extremities by the head of the child; but these must be distinguished from puerperal convulsion, where every muscle of the body is called into action, more particularly the heart. The action of this important muscle prevents the return of the blood, and causes a dreadful congestion on the head; and this, combined with the glassy appearance of the eye, and stertorous breathing, when preceded by the uterus acting on its orifice, I should call the marked symptoms of puerperal convulsions. Miguel speaks of convulsions in the early months of pregnancy; these I consider to be nothing more than common convulsions, not at all *dependent* on pregnancy, though perhaps *aggravated* by it; they commonly end, or wear themselves out, without the least danger to the woman; other than these, I have never met with in the early months. But I am surprised that he should call them spasms, as he calls tetanus; and should distinguish betwixt spasms and convulsions, defining spasm to be contraction without dilatation, but convulsion to consist of spasm with alternate dilatation. What, we may ask, is the cause of that action in the present case; unquestionably the pressure of the brain arising from the engorgement of its blood-vessels, as every muscle appears to be in action, excepting the one that conveyed the excitement in the first instance, and that also in many cases, but in a very imperfect manner; frequently we find in convulsions that the child has been expelled by the convulsions in a few pains, when, on other oc-

casions, the same woman has had lingering labours, arising from the uterus acting with the other muscles; in these instances no danger is to be apprehended, as there is a sufficient quantity of blood retained by the uterus to prevent an over-distention of the vessels of the head. The name convulsion has not been given to the contraction of the heart and other parts, though strictly speaking, these are convulsions, but we find their excessive contraction designated by a term for each particular organ, as vomiting for the stomach, voiding urine for the bladder, palpitation for the heart, and hiccup for the diaphragm; but these are of little consequence to the present question.

"Once more I would impress on the accoucheur the words of Mauriceau; that convulsions are highly dangerous to both mother and child, unless the female is delivered as soon as they appear, having recourse, in certain cases, to ordinary treatment, until the os uteri begins to dilate. La Motte expresses the same opinion, but in a more equivocating manner. Gardien says you ought to wait, because labour comes on very quickly, and the child is sometimes born in a couple of pains. Two instances that I have met with support the opinion of Miguel, that convulsions are mitigated by the discharge of the Liq. Amnii. These were the only cases in which the membranes were not broken before my arrival. In one instance the woman had no return of pain or convulsion for many hours, and the other labour proceeded very well in about twenty minutes. Miguel is of opinion that the os uteri in some cases cannot be dilated; but I have no doubt that it may be always effected by holding the woman by strength of arm. He advises the os uteri to be cut into; but this is an unnecessary and useless introduction of instruments; for in the worst cases I have seen, the os uteri may always be dilated by a little more trouble; the only reason I can fancy for such a proceeding is, that the operator is often, in a great measure, paralysed by the shocking sight before him.

"It has often been asserted, that in some cases it is impossible to turn. I have been fortunate enough to have met with no such case. The Edinburgh Med. Mag. states, that the os uteri cannot be dilated until its neck is lost or obliterated. In general it is

found that convulsions carry off the patient just as the child's head is born; this is the consequence of deferring the delivery too long. A great degree of excitement is caused by the accoucher's hand first passing through the part; and when the disease is fully formed, the moment the accoucher assists, the fatal mischief ensues; the spasms increase, the head becomes more turgid, and, in the general struggle of nature, apoplexy is produced. Then we look back on our patient, and fruitlessly regret that we had not been more prompt in our treatment. If, then, the convulsions be not increased to an alarming degree by the first efforts to dilate the Os Uteri, the operator should continue as quickly as possible, until it is sufficiently dilated to bring away the child; then proceed to turn. The operation of turning may in these cases be more easily effected than in any others, the Uterus being completely flaccid; if it contract at all, it is only very partially; a few fibres perhaps in one part, the other parts remaining completely flaccid, so that the child is very easily turned, and may be brought away with the greatest safety. I should advise every one, before they proceed to turn the child, to administer the Ergot of Rye. I have found it in most cases efficacious in producing expulsive efforts after the membranes have been ruptured, expelling the child generally in a few pains, and in every case it appears to remove the more alarming symptoms of the convulsions, and I therefore consider it to be highly beneficial." 12.

We have given a full account of Mr. Michell's observations on the use of the ergot of rye in difficult parturition in the Review department of this Journal. Mr. Michell is an old and experienced practitioner—consequently his remarks are highly deserving of attention.

43. RAPIDLY FATAL DISSECTION WOUND.

At eight o'clock in the evening of the 27th November, a young student (Mr. Kissam) cut his middle finger while examining the abdominal viscera of a dead body. He complained almost immediately of smarting

pain, and quickly washed the parts clean with soap and water. He was desired by Dr. Godman, the professor of Anatomy to suck the wound; but this he neglected, and went on with the examination, merely washing his hands when he had done. Before he got up next morning he was seized with nausea and vomiting—quick pulse—tumultuous nervous agitation. Dr. Mott ordered him to go home to his father, who was a physician; to get bled—to apply a poultice—and keep very quiet. He went home—took a purgative, but was not bled. He spent a bad day and night. On the morning of Thursday (the accident happened on Tuesday) Professor Godman met Dr. Mott and the elder Kissam in consultation. His countenance was dreadful. "The left side of his face looked very much like the face of a paralytic, the muscles seeming relaxed and powerless, although there was no distortion towards the right side. An expression of intense anxiety was imparted to the countenance, and gave an air of wildness and alarm to all his movements. He complained of great pain in his head; the arm was not remarkably painful, the wounded finger slightly so, and the wound itself exhibited nothing of an active inflammation; the pulse was not remarkably excited. The absorbents of the chest extending along the border of the pectoralis major were visible, being inflamed; none of the absorbents of the arm were similarly obvious."

Poultices—leeches—the spirit vapour-bath.* 4 o'clock. All the symptoms were rather aggravated than ameliorated. There were signs of congestion about the head—the pulse full and strong. He was bled to eight ounces, with relief—great relief of all the symptoms; except the nausea and vomiting, which were increased. A blister was directed to the epigastrium—and to the insides of the legs. Friday. The gastric irritability continues—delirious in the night—now composed. He this morning threw up some solid faeces in the attempts to vomit. The head-ach was severe—no pain on pressure of the abdomen. Took some

* Dr. Godman assures us that he has often seen the most decided advantages from the spirit vapour-bath in cases of poisoned wounds.—Ed.

ammonia and spir. æth. comp. which he retained. He fell asleep, and remained quiet for some time. 10, P. M. The determination of blood to the head returned, and he was cupped and blistered with considerable relief. He now, for the first time, complained of his finger, which was slightly swollen. Dr. G. laid open the finger freely, from the first joint to the extremity. Dr. Hosack joined in consultation and venesection was again employed: when the violence of the symptoms was again abated. The irritability of stomach continued. At midnight Dr. Mott was called to the patient, and found him with symptoms of ileus. He administered, *per anum*, 120 drops of denarcotized laudanum. This suspended the vomiting, and induced sleep with a copious perspiration. When he awoke next morning, he was perfectly rational, and altogether so much better, that sanguine hopes of his recovery were entertained.

Saturday. This day all hopes ceased, as the hand of death was evidently upon him. He retained his faculties, and manifested the most perfect serenity of mind till the moment of his decease, which happened early on Sunday morning.

No examination was made; but Dr. Godman expressed his decided opinion that this young gentleman died of inflammation of the mucous membrane of the bowels—"and that of the wound received in dissection was a mere coincidence, and did not produce the symptoms from which the patient suffered." We confess that, in this opinion, we cannot coincide with Dr. Godman. Inflammation of the mucous membrane of the bowels may have existed, and may have been the main cause of death; but we should be inclined to view this inflammation as a consequence of the morbid poison introduced into the system through the medium of the wound, and by no means an idiopathic and simple affection.—*American Journal of the Medical Sciences*, No. 11.

44. SIGNS OF DROWNING.

M. Orfila has made a great number of experiments with the view of determining whether submersion has taken place prior or subsequent to death—an important de-

cision in legal medicine. The following are the inferences which he has drawn.

1. "That the red, livid, and swelled condition of the face, with froth at the mouth and nostrils, which some authors have laid down as indicating that the submersion has taken place during life, leads to no such inference, as it is wanting in many who have been drowned, and is present in many who have met their death by other means.

"2. That the same remarks apply to extreme paleness of the face, which is an effect of the body remaining long in the water. M. Orfila here describes the alterations which the skin undergoes in those who have been long submersed. He asserts that on the legs the integuments become indigo colour, and then brownish on exposure to the air, while the rest of the body is very white, but the moment it comes into contact with the air, it is successively converted into brown and green, commencing at the chest. Remaining long in the water also brings on abrasions of the skin, which may give rise to the idea of wounds having been inflicted.

"3. Excoriations of the fingers and traces of dirt under the nails are of no assistance, because they are wanting in those who are drowned before they come to the bottom, while they may be present in a body which, being thrown into a river, strikes against various obstacles.

"4. Injections of the brain and its membranes, M. Orfila thinks would be a satisfactory indication of drowning, if it were proved that the body became cold in a vertical position. As, however, this sign is frequently absent in those who have been drowned, so it cannot be regarded as a positive proof.

"5. In those who have been drowned, the right cavities of the heart, the venæ cavæ, the pulmonary veins and arteries, are generally distended by a quantity of black blood, while the left side of the heart and the aorta are much less filled; the right ventricle is of a blackish brown; the left of a clear rose colour; and the right cavities retain a less contractile power than the left. This condition, however, is met with in many cases of sudden death.

"6. Although the blood is generally fluid, yet M. Orfila has seen it coagulated in one

individual who was drowned; a fact also observed by Lafosse, and more recently by M. Avisard.

"7. The dissection of more than fifty persons who had been drowned has satisfied M. Orfila that it is a mistake to suppose that in drowning the individuals die during inspiration, and that, in consequence, they have the diaphragm pushed into the abdomen, and the chest elevated.

"8. He regards the colour of the abdominal viscera as indicative of asphyxia in general, but not of drowning in particular.

"9. The experiments of Orfila, and some other physiologists, show that water enters the stomachs of those who drown themselves; while this is not the case with regard to bodies thrown into the water. But, in order to give its full value to this sign, it would require to be proved that the water had neither been swallowed before death, nor injected after it.

"10. It is not true that the epiglottis is pushed down upon the larynx.

"11. Great importance had been attributed to the presence of sanguineous froth in the windpipe. M. Orfila objects, however, that this exists in other cases, as in death from epilepsy and hanging; while it is

wanting in the drowned who have remained long under water, without coming to the surface to breathe.

"M. Orfila made a considerable number of experiments to ascertain if water enters into the ramifications of the bronchia of the drowned; and he has always found that the fluid entered the lungs of the animal, and that the quantity was greater or less in proportion to the care took to keep the head erect in lifting the animal out of the water. But the fluid is not found in the air-passages, if the examination be made soon after death. As to the question, whether the water enters the lungs after death, the experiments of M. Orfila agree with those of M. Piorry, proving that it does enter, and more completely the more vertical the position of the animal; and consequently, the presence of water is not a sufficient proof of drowning, as water enters the air-passages of the dead body, and that the only absolute sign is the presence of water in the minute ramifications of the bronchia: it being proved that this water is the same as that in which the individual was immersed, that it had been injected after death, and could not have penetrated to the lungs from the vertical position of the body in the liquid."

HOSPITAL PRACTICE.

45. ABSCESS IN THE LUNGS AFTER INJURIES AND OPERATIONS.

[St. George's Hospital.]

Prior to the publication of Mr. Rose's paper in the *Medico-Chirurgical Transactions*, the attention of the profession in this country was but little directed to the above very fatal affection. It is true that Mr. Guthrie and Mr. Bell had previously attended to it, and that its frequency and importance had been appreciated and perhaps overrated by Dessault upon the Continent. These notices, however, were diffused in elaborate works, and quite beyond the reach of the majority of those, who become acquainted by means of the medical journals, with the transactions of medical societies. Mr. Rose's

paper, or an abstract of it, will therefore be read where the works of Mr. Bell or Mr. Guthrie most probably will not, and with the view of contributing some further illustrations, we intend to bring together some cases which have recently occurred.

We alluded, in a previous article, to the frequent, we might almost say constant, occurrence of pulmonary abscesses or pleural inflammation, as a sequence or consequence of phlebitis. Cavil as we may on the why and the wherefore, the fact is undeniable, and as we have dwelt upon the subject already, we pursue it no further at present.

The case which we are going to detail occurred very recently at St. George's, and, as usually happens, the affection of the

lungs proceeded to a fatal termination, with scarcely a symptom to indicate its presence.

Case 1.—Compound fracture of the Right Leg.—Abscesses in the Lungs and Liver. Robert Rich, ætatis 37, a healthy looking muscular man, was admitted into hospital, 23d of June, under the care of Mr. Keate, with compound fracture of the tibia and fibula, a little below their centre. The external wound was of no great size, but considerable effusion had taken place underneath the integuments, and the acromioclavicular articulation had been injured, but apparently neither fractured nor displaced. The injury was received in falling from a cart, when a sack of coals came down upon the leg.

The limb was placed in junks, and lint and adhesive plaster applied upon the wound. Spirit lotion—haustus anodynus—haustus sennæ.

On the 26th he was feverish, and ordered infusion of roses, with dilute sulphuric acid and sulphate of magnesia. On the 30th, he had a rigor, succeeded by head-ach, and pyrexia. Castor oil, the liquor opii sedativus, and camphor mixture were employed, and, on the 2d of July, he was almost free from fever, the pulse had subsided, the tongue was cleaning, the bowels were open, and matter appeared to be forming round the broken extremities of the bones.

He continued so well, that the limb, on the 4th, was put up in Mr. Amesbury's apparatus, and every thing appeared to be favourable to the evening of the 9th. On that day he complained of some head-ach, and, next morning, was seized with a rigor, which was followed by heat and malaise. The tongue was whitish—the pulse was full and 80.

Syr. papav. ʒj. Mist. camph. ʒ iss. ter die.

The rigor returned in the night, and again on the morning of the 11th, accompanied with nausea, head-ach, and frequency of pulse. The leg was not painful.

Sod. carb. ʒj.—Magnes. carb. grs. vj.—Pulv. rhei. grs. ij.—T. opti, ℥. v.—Mist. camph. ʒ iss. 6ta. quæque horâ.—Cataplasma panis cruri.

The rigors were frequent in the course of the 11th, and attended with a good deal of tenderness in the epigastrium and right hy-

pochondrium. The vomiting was constant both of food and medicine—the tongue was brown—the pulse 120 and fluttering. He was ordered an ounce of camphor mixture, and a little alteration was made in the draught. The shivering returned in the night, but he was better, notwithstanding, on the 12th; the tenderness of the epigastrium was diminished; the tongue was not so brown; the pulse was no more than 100 and firmer in its beat; and the vomiting had somewhat subsided.

The medicines were repeated, but the improvement of the 12th was fallacious, for he was seized with delirium in the night, and on the 13th was worse than before. The pulse was irregular, and had risen to 125—he vomited every thing he took, and lay in a condition approaching to coma, except that he was sensible when roused.

A draught, containing two grains of quinine, four minims of dilute sulphuric acid, half a scruple of aromatic confection, and ten drachms of camphor mixture, was given twice a day, with the addition at night of an ounce of æther mixture, and forty minims of tincture of opium. On the 14th he was apparently better; but there was still much abdominal tenderness. On the 15th the symptoms were aggravated; pulse small and 120—vomiting—delirium—tenderness of abdomen. Twenty leeches were applied to the belly, but without effect. The abdomen grew tympanitic—the pulse more rapid—he vomited every thing—was delirious, and on the evening of the 17th he died.

We should state that the liquor ammoniac and a blister had been applied to the abdomen the day before his death; the discharge from the wound, too, had almost entirely ceased.

Sectio Cadaveris. Some opacity of the tunica arachnoides, especially at the base of the brain, and slight depositions of lymph. The plexus choroides presented a singular appearance, being converted into a gland-like tubercular body.

The principal disease was in the thorax and abdomen. In the former, the pleuræ on the right side were extremely inflamed, and serum and pus were collected in their cavity. On the left side, the membrane was also inflamed, and serum and lymph, but no pus, were discovered. In the substance of the lungs, and especially the left, were

tubercular masses of lymph and pus, numerous and varying in size. Similar deposits existed in abundance in the liver, and were seated, for the most part, immediately beneath the peritoneum investing the viscus. The intestines were generally sound, but the mucous membrane of the colon, near its valve, was injected and inflamed, though free from ulceration.

It is singular, indeed unaccountable, that the pleuræ and lungs should have been so diseased as they were, without having presented a symptom of disorder. The condition of the liver was productive of tenderness at the epigastrium, whilst the very highest degree of inflammation of a membrane like the pleura was totally unaccompanied with dyspnoea or pain! This is one of those things which may be "dreamt of," but will never, we fear, be comprehended "in our philosophy." It is probable that the rigors, malaise, and pyrexia, which set in on the 9th, sixteen days from the occurrence of the accident, were symptomatic of the formation of the depositions in the liver and the lungs, though cases not unfrequently occur, where no such particular indications are observed.

Case 2. Amputation above the Knee—Inflammation of the Pleura, and Abscess of the Lungs—Death on the 17th day.* A boy was admitted into St. George's Hospital, April the 9th, under the care of Mr. Brodie, with necrosis of the tibia and disease of the ankle. Tonic medicines were employed for a week or two, and amputation was performed above the knee upon the 24th, by the flap operation. A number of vessels required to be tied, and the boy was excessively irritable during the whole of the time.

For the first few days the appearance of the patient was unpromising; the tongue was brown; the pulse on the 25th 120, and on the succeeding days higher still, and indicative of great irritation; the surface hot; the countenance expressive of anxiety. The dressings were removed from the stump on the evening of the 28th, when it presented an unfavourable aspect. The tincture of

benzoin was applied, and on the 30th, not only the stump but the symptoms altogether were improved, the tongue being cleaner, and the countenance less anxious.

May 1. The flaps of the stump have retracted, and the bone protrudes in consequence. Pulse 160, but not hard—tongue whitish—skin hot—less thirst. He is not quite so irritable as he was, and eats a little pudding with relish. On the 2d, his diet was changed to porter and roast meat, whilst a mixture of ten ounces of decoction of bark with ten grains of aromatic confection was given thrice daily.

May 4th. Circumstances occurred in the ward that exerted an unfavourable influence on the mind of the patient. He is anxious and irritable; pulse quick and bounding; tongue brown and red at the sides and tip; thirst; nausea; tenderness on pressure of the thigh or abdomen. The stump was not slow in partaking of the general disturbance; it was white, sloughy, and sensitive in the highest degree, and the bone protruded from its surface for an inch or more. On the 6th he appeared to be moribund, the pulse being small, the countenance sunken, the mouth parched, the tongue dry and coated, and, to crown the whole, there was a harassing diarrhoea.

R. Quinin. sulphat. gr. jss.—Acid. sulph. dil. ℥ iij.—Aq. distil. 3vij.—Tinct. Aurantii, 3j.—Tinct. opti. gtt. iv.—M. ter die.—Vin. rub. oss. quotidie.

On the 7th and 8th, he appeared to be sinking, the diarrhoea persisted, the countenance was hippocratic. Eggs beat up in brandy, and red wine were administered largely, and chalk mixture directed to be taken till the purging should cease, which it did in the course of the day, though the mixture, by mistake, was carried on.

The symptoms persisted, for worse they could scarcely be; the integuments of the sacrum and hips became inflamed and excoriated, delirium set in, and he died on the 11th, having lingered surprisingly long.

Dissection. On raising the sternum, both the pleura costalis and pleura pulmonalis were found to be inflamed, and coated with a layer of apparently recent lymph. The adhesions were numerous and strong, most of them recent, others of older date. About

* We alluded to this at page 236 of the 17th number of the Journal, but with another object.

an ounce and a half of sero-purulent fluid was discovered in the right side of the chest, but none in the left. The pleura were injected in parts, and every where more vascular than natural, particularly in spots corresponding to abscesses which had formed in the substance of the lungs. These abscesses were numerous, varied from the size of a hazel nut to that of a pea, and were scattered over the surface of both the lungs, immediately beneath the pleura pulmonalis. The heart was natural, the liver rather large but otherwise healthy, the gall-bladder distended, the mesenteric glands enlarged.

The stump had a sloughy appearance, and the bone was protruding for nearly two inches. Matter was collected in the cellular membrane between the origins of the adductor longus and magnus; the periosteum was detached, and in parts in a sloughy condition, and the purulent matter had insinuated itself to some extent between the periosteum and bones. The vessels of the limb were examined, but no deviation from health could be discovered in them.

The boy from the first was never doing well, but still there was a trifling amendment when the impression was made on his *morale*. This was on the 3d, nine days from the operation, the time when the pulmonary affection is exceedingly apt to supervene. It may, therefore, be a question very difficult to solve, to which of the two we shall attribute the change, to the moral impression, or the latent and physical disease developing itself in the lungs. It is generally recommended to treat this affection (that is, when we can trace it) by active depletion; active in proportion to its insidiousness and rapidity of march. The rule may be a good one, but must have its exceptions notwithstanding, for in a case like the above, that was stamped from the beginning with the features of irritability and depression, we think there are few who would have ventured to deplete.

Case 3. A robust young man was sitting on the shafts of his cart, when he fell with his right leg under the wheel, and received a compound dislocation and fracture of the tarsal bones. He was brought to St. George's, and amputation performed below the knee, by Mr. Rose. This was on the

9th of June. A little hæmorrhage occurred after the operation, and in the evening of that day he was fidgetty and restless, with a flushed face, burning skin, and pulse above 100, and full. He was bled from the arm, and took thirty minims of the liquor opii sedativus, but he passed an indifferent night, and was disturbed in the early part by the starting of the stump.

On the 10th there were symptoms of strong arterial action, the pulse being 100, hard and full—the face high-coloured and bathed in perspiration—the tongue white and rough—the thirst rather urgent. *Saline with liq. ant. tart. 3 ss.—mag. sulph. ʒi. sextis horis.*

On the 11th, the pulse, &c. had in some degree subsided, and the patient was better. This improvement, however, was, unhappily, a prelude to a worse state of things than before, for on the two succeeding days, the commencement of a change from excitement of the system to depression was perceptible to all. The pulse was as frequent but not quite so full, the tongue white and roughish, the thirst not so urgent, the morbid irritability excessive, and a quickness of manner the common forerunner of delirium. The dressings were removed from the stump upon the 12th, when its lips were discovered to be gaping, and its surface sloughy and white. Fresh strips of plaster and lint were applied in the first instance, but were changed on the 13th for the tincture of benzoin and cold water,* after which he was seized with a shivering, succeeded by heat and vertigo. He passed an extremely bad night, and suffered from a similar attack on the dressing of the stump next day. The pulse was now rather tremulous, but full

* The tincture of benzoin is an excellent application to the surface of a stump that is disposed to slough. In one case which we witnessed, the stump had a most unfavourable aspect, and promised to slough most extensively, but the benzoin acted like a charm. The tincture should be poured into a gallipot, pieces of lint not merely dipped but soaked in it, and these should be placed upon the stump, which may also be washed with the benzoin. It is a favourite application of Mr. Brodie in cases of this kind.

notwithstanding—the skin was cooler but clammy to the touch—the tongue a little cleaner—the hurriedness of manner more marked.

15th. More composed; pulse not so frequent, but weak; countenance rather pinched and sallow; bowels open. Stump to be dressed with green digestive. *Quin. sulph. grs. iii.—acid sulph. dil. ℥. vi.—tinct. zingib. ʒi.—infus. ros. ʒiiss. tertia quæq. hor.*

In the afternoon he had a convulsive fit, succeeded by vomiting and rigor in the evening. The vomiting continued, though not with unabated severity, throughout the 16th, the surface getting cool, the pulse ranging from 110 to as high as 140, and the thigh being tender on pressure in the course of the femoral vessels. The night of that day was passed between dozing and delirium, and the next morning found him in articulo mortis. The secretion had ceased from the face of the stump, he was alternately sunk in a state of collapse, or raving under the influence of delirium, and thus he held out till the 18th, when he died.

Section Cadaveris. On opening the chest, considerable adhesions of the pleura were discovered, and the usual post-mortem appearances that indicate inflammation of the membrane. In the right lung, immediately beneath the pleura pulmonalis was discovered a yellowish mass, much harder than the neighbouring lung, which when cut into gave issue to particles of pus. There were many other little tumours of a similar description in both the lungs, but none of them so large as the preceding. The liver was large and two or three ecchymosed spots were discovered on its surface, though its structure was otherwise natural.

Besides these appearances in the thorax and abdomen, inflammation of the femoral vein had obtained from the stump to the profunda.

Here then are three cases of pulmonary abscess, two of them after operations, occurring at one hospital, in the course of two months, strong presumptive evidence, or rather proof positive, that the affection is far from uncommon. Mr. Rose in his paper observes, that in all the cases which he had seen, "these abscesses took place at some period between the end of the second and that of the fifth week after the accident which gave

rise to them." There is a degree of obscurity in the passage, as we cannot determine to which Mr. Rose is alluding—the *formation* of the abscess, or the period of its fatal *termination*. If the former is intended, its accuracy as a general position is invalidated by two of the cases we have recorded, in one of which the unfavourable symptoms commenced on the tenth day, and in the other the patient was dead on the ninth. Mr. Rose likewise says that the abscesses are most apt to form, when the parts in which the injury took place are in a state of suppuration, and farther, that "a favourable change has frequently taken place in the wound, before the symptoms of the internal abscess have begun to manifest themselves."

As general rules, the above, without doubt, are correct, but then they are not corroborated by the cases we referred to before, in both of which the stump was unhealthy and sloughy, instead of being in a state of suppuration. Whatever is the state of the stump or the wound before the affection of the lungs becomes established, the secretion is afterwards affected, in some cases entirely arrested.

We hope to be excused for extending this paper to the length we have done, but the interesting nature of the cases recorded, and the general importance of the subject will we trust be sufficient apology.

46. EPIDEMIC ERYSIPELAS.

[Hôpital de la Pitié.]

At page 284 of No. XVII. we alluded to the prevalence of erysipelas at La Pitié, and related some cases in which blisters had been used. The epidemic continued for nearly a month, and has furnished the subject of a second report. As it happens rather oddly in this new batch of cases, that not a solitary blister was employed, but the treatment adopted was leeching and bleeding, we revert to the subject without any fear of repetition, but as much of variety as a theme like erysipelas can afford.

Case 1. A young man of good constitution and sanguineous temperament had complained of sore throat for some days,

when he was seized on a sudden with vertigo, and fell to the ground in a fainting fit. Twenty-five leeches were applied to the anus, a poultice to the neck, and sinapisms to the feet with pediluvia. This was on the first of May, and on the second, erysipelas appeared upon the face.

On the 3d, he was admitted into hospital, the erysipelas being of a bright red colour, the pulse nearly natural, the tongue white and reddish at its edges, the skin hot and dry, cephalalgia. There was neither nausea nor vomiting, but there was soreness of throat, and the velum palati and bag of the pharynx were redder than natural. He was bled from the arm in the morning, and in the evening five and twenty leeches were applied to the neck. The erysipelas spread over the face, and the bleeding was repeated on the 4th and 5th. On the 6th, the neck became affected, but the colour of the inflammation was paler; The skin was intensely hot: the tongue dryer; no pain of abdomen nor vomiting. *Leeches to the anus.* On the 9th, the patient was light-headed, and this increased on the 11th, to such furious delirium that the strait-waistcoat was put in requisition. The erysipelas had deserted the face and was principally seated on the chest, while a separate blush had appeared around the lancet-wound made in the arm. The stools were passed in bed, the teeth incrustated, the expression haggard. Antispasmodics and lavements were employed, and gradually the patient revived from the prostration and collapse in which he lay, the tongue got moist, he complained of weakness, and asked for food. On the 18th, the erysipelas had completely disappeared, and the patient was convalescent, but it returned on the 10th of June, "travelling" rapidly from part to part. Leeches were placed upon the epigastrium, and on the 26th, when the report was published, the patient was in a very debilitated state.

The treatment of M. Lisfranc appears to have been judicious, which is more than we can say for the remarks of the reporter. It may be, however, that the bleedings and leechings might, perhaps, have been ordered more sparingly, and salines, with diaphoretics, exhibited instead.

Case 2. This was likewise a young man

of robust and sanguineous habit, who was attacked with erysipelas of the face, and received into La Pitié on account of the affection. Three bleedings were employed, with emollient drinks, and "sinapised" pediluvia. On the eighth day from its first invasion, the erysipelas had completely disappeared.

The above were both patients of strong constitutions, who were seized with erysipelas at home, and entered the hospital for the affection. In cases of that kind, depletion can be borne, and is often imperiously required, whilst in those who have long been the tenants of a hospital ward, pulled down by disease and the doctor, the erysipelas, when it comes, is marked, for the most part, with the features of debility, and is not to be "put out" by a squadron of leeches, or the lancet.

The epidemic which prevailed at La Pitié, where the surgical wards are on the ground, and proverbially unwholesome, appears to have been marked, as epidemics invariably are, with particular characters. A case or two may serve as the best illustration.

Case 3. A young man of a lymphatic habit of body, who entered for ophthalmia, after some general bleedings, had a seton applied in the nucha: in the course of a week, erysipelas appeared on the back of the neck; the skin was hot and dry; the tongue was invested with a yellowish fur, and red at the edges; the epigastrium sensible to pressure, if applied with any force. *Gum water—thirty leeches to the epigastrium.* The erysipelas abandoned the neck, and spread upon the back; then attacked the face, and, finally, expended its ire on the nose, where it left a few mementos in the shape of vesications.

Case 4. A young woman of scrofulous habit, with enlarged cervical glands, had also a seton applied in the nucha, for ophthalmia, and was seized with erysipelas, which spread over the shoulders, and attacked the face, where it continued for several days. The skin was hot and dry; the tongue thickened, white in its centre, and red at the border; no vomiting, nor nausea. Leeches were applied to the epigastrium, and after their application, ten-

derness of the part was observed upon pressure. Frequent cough came on, with anxiety, difficult respiration, frothy expectoration. *râle sibilant* at the apex of the right lung, *râle sonore* mixed up with the *râle sibilant* at its basis, and *râle sonore* over the whole of the left lung. A fresh relay of leeches was put on the epigastrium, when the symptoms of bronchitis subsided, and the erysipelas likewise disappeared.

From what we have detailed, it will be evident that a degree, more or less perceptible, of gastric derangement, or "gastricity," as M. Lisfranc has termed it, was a feature in the hospital epidemic. The tenderness of the epigastrium and state of the tongue were warranty enough for the use of the leeches, though scouted in toto by the Parisian Reporter, who quarrels with the surgeon for using any remedies at all!

Thus it is ever with the million! Semper in extremis is their motto—the *medicina perturbatrix* on this side the Channel—the *medicina expectans* on that!

47. AMAUROSIS—"AMAUROTIC CAT'S EYE OF BEER."

[St. Bartholomew's Hospital.]

The subject of the above very singular heading was a delicate barber of 23, who was under the care of Mr. Lawrence.

About 8 years previous to admission, the left eye began to be affected, and the right in the last nine months. The vision of the former was so far destroyed, that the patient could barely distinguish light from darkness, but with the latter he could read large print. The anterior chamber in each was unusually small, the iris dark brown and transparent, the pupil half contracted, sluggish, and dull. On dilating the pupil of the left eye, a grey or dull yellow concave opacity was observed, with blood-vessels ramifying on it. In the right, the opacity was limited, and the blood-vessels not to be seen. Mr. Lawrence observed that the amaurosis was dependent on some organic disease, but it was difficult to determine whether it consisted in a change in the retina, or a want of the pigmentum nigrum.

The patient was cupped in the back of

the neck, and five grains of blue pill administered twice in the day. Nothing further was done for him, and the patient was dismissed at the end of a month, no better than when he was admitted.

We shall here introduce two cases of amaurosis, which were treated at La Pitié with greater success than the above.

AMAUROSIS SUCCESSFULLY TREATED BY THE AMMONIACAL OINTMENT.

M. Lisfranc, at the hospital in question, has been giving a trial to Gondret's ammoniacal ointment, and it seems that, in cases arising from an affection of the fifth pair of nerves, the remedy has proved of considerable service.

The ointment is in general applied upon the forehead, as the frontal ramifications of the fifth pair are distributed thereon after traversing the orbit. In the following cases the ointment was employed, and relieved the amaurosis.

Case 1. A soldier of robust constitution, who had formerly campaigned in hot countries, and been exposed, in bivouacking, to the cold night air, found his vision grow feeble in the course of 1824. In the following year, he was unable to see his way about the streets, and was directed to have a seton in the neck, some leeches to the temples, and ordered some pills, composition unknown. His sight was improved by the measures employed, and he was able to distinguish various objects pretty well. The amendment, however, was temporary only, and, on the 10th of last January he entered La Pitié. He was bled from the arm, and ordered an emetic, but without effect; he could barely distinguish light from darkness—the pupils were dilated, but acted feebly, and the left was more sluggish than the right. On being questioned respecting the history of the disease, he replied that, in the first instance, he could see rather better towards evening or twilight than in mid-day; he could also distinguish more clearly any object above him, than one which was below, or on a level with the eyes.

On the 24th of January, the head being shaved, the ammoniacal ointment was applied upon the forehead, and its employment continued till the 17th of February.

Pustules were formed, which ulcerated deeply, and the case was proceeding in a favourable manner, when a severe erysipelas seized upon the head, and required the most active depletion. The patient was bled seven times in the course of as many days, and sixty leeches were applied besides. The erysipelas disappeared, and the powers of vision were exceedingly improved; in the right eye, indeed, they were entirely restored. The left, which was always more affected than the other, was scarcely, if at all improved.

Case 2. A tailor, ætatis 39, had laboured under amaurosis for two years past, and was admitted into hospital, incapable of seeing at all. The pupils were dilated, and contracted but feebly on the approach of light.—the patient had the peculiar undefinable aspect which invariably marks the amaurotic—the globe of the eye was continually rolling in the orbit, and was, in general, rotated upwards; and, lastly, the power of directing the organ, particularly sideways, was already beginning to be lost. The disease had come gradually on, and the patient attributed its origin to his business requiring him to work much by candle-light.

The ammoniacal ointment was applied upon the forehead and crown of the head, and its use was continued for upwards of a fortnight. Abscesses were formed, and converted into healthy ulcerations, which furnished a copious discharge. The good effects of the *issue* were quickly apparent, for, first, the patient was enabled to distinguish the day-light, then regained the power of discerning the objects around him, and finally, at the expiration of a couple of months, his sight was as perfect as before the amaurosis commenced.

The reporter observes that, in order to prove beneficial, the application of the ointment should be always persevered in, till more than superficial ulcerations are produced. In both of the cases recorded above, the disease was very far from being recent, and required the treatment to be continued, in one case, for four months, and in the other for nearly as long.

It is curious that the soldier "could distinguish more clearly any object above him, than one which was below, or on a level with the eyes." It was imagined by Rich-

ter, in similar cases, that a point of the retina still continues sensible to the impression of light, and he cited the case of a patient, who was otherwise blind, but retained the extraordinary power of perceiving an object above the *ala nasi*. His vision was limited, but so perfect, notwithstanding, at this particular point, that he saw, at a considerable distance, the arrow on the top of a steeple though it always required much adjustment and balancing beforehand. The dilatation of the pupils is a frequent occurrence, and Mr. Ware has observed that the above has been commonly the case when electricity proved beneficial. The disease altogether is attended with such curious and frequently anomalous characters, and its treatment is so often unsuccessful, that any contribution to the scanty stock of *remedies* (not drugs) must prove an acquisition of value.

PUNCTURE OF THE RECTUM.

It appears that a boy, having been knocked down by a horse and cart, received a cut on the head, and was carried in a state of insensibility to St. Bartholomew's Hospital. Calomel and jalap were ordered, and on the following day he became sensible; but as his bowels had not acted, the calomel and jalap were repeated, and were followed in the middle of the day by an enema. The boy appeared to suffer greatly the remainder of the day, and died at eleven that night. On dissection, there was found a "slight fracture of the base of the cranium, with effusion of blood beneath the *dura mater*." On opening the abdomen, a quantity of light brown fluid was discovered in the cavity of the peritoneum, which exhibited marks of inflammation; and on prosecuting the examination, a "hole" was observed in the anterior part of the rectum. The "light brown" fluid, we are told, eventually proved to be oil, and the hole to have been made by the glyster-pipe, which was of a "most unwarrantable length, namely, seven or eight inches."

It may seem altogether incredible, that a case like the above could be converted into a handle for the abuse of "our charitable institutions," and the medical officers attached to them. So, however, it is; and amongst other good things, we are told that cases similar to this in *atrocities* are constantly

occurring at our public hospitals. A person who had any pretension to a knowledge of medical matters would pause awhile, perhaps, before he attributed the death of the boy to the effusion of oil in the cavity of the peritoneum. The enema was administered in the middle of the day, and the patient was dead by eleven at night, a very rapid termination indeed of peritoneal inflammation! The bile, we should imagine, is rather more acrid than oil, and, in the celebrated cases of wound of the gall-bladder and effusion of its contents into the cavity of the peritoneum, recorded by Dr. Steward and Sabatier, the patients survived several days, one of them as much as a week. A boy was admitted in the Spring into St. George's Hospital, who had been shot in the belly with a fowling piece. The colon was wounded, and the fæces extravasated in abundance, but he lived, notwithstanding, for three days at least. It is utterly repugnant to the dictates of experience, or even common sense, to imagine that, in ten or eleven short hours, the inflammation of the peritoneum should have run its course in a healthy boy.

Granting, however, that the patient *did* die of the enema, still the nurse and not the surgeon was at fault. Do these medical reformers intend that the glysters should be under the immediate direction of the surgeons or physicians, or wish these to be responsible for all and every of "the negligences and ignorances" of their subalterns? The doctrine, at any rate, is recent, for we remember not very long ago, when a celebrated surgeon, the Coryphæus of his party, lost a patient by bleeding from the cuts which he had made in erysipelas, absolution was pronounced on the gentleman himself, and the blame very quietly laid on the back of the dresser. The change, we suppose, is attributable to the stride which has been taken by the "march of intellect," and nothing can be wondered at in an age of improvement like this! The accident occurred under the care of Mr. Vincent; but Mr. Lawrence, of course, never thinks of confiding so *delicate* an operation to any other hands than his own!

48. RUPTURE OF THE ILEUM.

[Guy's Hospital.]

An Irish labourer had the handle of a hand-cart driven with violence against his abdomen, on the 30th of June. He vomited, and in the course of an hour was seen by a surgeon, who bled him and gave him some pills. When taken to the hospital he had the usual symptoms of ruptured intestine, but so slight as to occasion a doubt as to the actual nature of the accident. Hot water was applied to the feet and the belly fomented, but next day the countenance was sunken; pulse 90, hard, sharp, and jerky; vomiting of a greenish fluid; thirst; pain and tenderness of abdomen; tongue furred and dry. Purgatives were given and leeches applied; but at 5, p. m. of the 2d, the patient expired.

On dissection, the marks of peritoneal inflammation were extremely intense; but, on tearing asunder the masses of lymph, the upper part of the ileum was found to contain two apertures with ragged edges, each of them about two-thirds of an inch square. The mucous membrane was not everted at the apertures, both of which were situated at the mesenteric side of the intestine, close to the point where the latter made a turn upon itself. One of the rents at the apex of the angle was perfectly open, the other, about half an inch lower, had opposite to it, on the other convolution of the intestine, a "large piece of lymph," which appeared to have fitted in the aperture, and plugged it up. There was an immense extravasation of fæces and serum into the cavity of the abdomen.—*Gazette*.

This case will bear upon the one which occurred at Bartholomew's Hospital; for here there was effusion enough in the cavity of the peritoneum, and yet the individual survived for upwards of 48 hours, instead of being carried off in ten! The reporter makes some sensible remarks upon the dangers of purgation in cases of ruptured intestine, a measure which inevitably tends to destroy what adhesions may form, or prevent their formation altogether. The gentleman appears to be rather more sanguine in his expectations than many, and entertains that *HOPE* which is said to come to all, even in so fatal an accident as this. He concludes some remarks by observing that

rupture of the intestine is not necessarily fatal, and adduces a case in the following number of the Journal we quote from, as affording a satisfactory confirmation of the truth of his opinion. The case is as follows.

A lad of a delicate habit was crushed between a cart and some palings at six in the evening of the 9th of July. He fell to the ground, the surface was blanched, and he vomited immediately afterwards. Bottles of hot water were applied to the feet, and when admitted into hospital the features were anxious and shrunk, breathing but little affected, abdomen, the seat of pain, swollen, and tender upon pressure, pulse quick, small and weak.—Being incapable of making water, the catheter was used, and warm fomentations applied to the abdomen. On the morning of the 10th, re-action had occurred, the face being coloured—the surface warm—pulse 130, small and weak—tongue a little furred. The abdomen was swollen, painful, and tender, especially on the left side, and a circular spot existed in the right hypochondrium, which was buffy, as if air or fluid were within it.—*Twenty leeches to abdomen—calomel and opium.*

In the evening the pulse was 150, small and sharp—vomiting at intervals, with some hiccup—extremities warm—countenance anxious—abdomen not very painful nor tender, but tense and swollen—*Calomel and opium repeated—four ounces of blood from the arm—12 leeches to left side.* He passed an indifferent night, and on the 11th the pulse was quick, small, and rather sharp, frequent vomiting. More leeches were put on, and the infusion menthæ comp. administered to allay the vomiting, which it did when two ounces had been taken. In the afternoon he was in more pain, had vomited again, and was troubled with a little hiccup. Leeches were again applied, and there being no stool, Mr. Callaway directed the nurse to throw up an enema, and especially to use no force.

In half an hour a solid healthy motion was the consequence, but the abdomen still continued tense—pulse 130, small and rather hard. *Poultice to the abdomen. Rep. pil. 12th.* Has been restless and a little delirious—at present free from pain—pulse 120, and sharper—tongue brownish—abdomen less tense and swollen, (he had had a fluid motion,) except on the left side little tender-

ness. *V. S. ad 3 vi.—Hirud. xij.—Infus. menth.—Cal. c. op.* There was no motion that day, and at night another enema (with the same precautions) was thrown up. *13th.* Better; but no stool yet. *Leeches, enema, and calomel and opium repeated.* He passed a quiet night, and on the 14th had several motions, indeed some purging supervened, but was stopped by the *mistura cretæ*. The patient soon recovered.

The reporter observes, that the early and remarkable swellings which occurred, can only be accounted for by supposing extravasation into the abdominal cavity. It is easier in cases of this kind to say what has not taken place than what has, and, for our own parts, we do not believe that the ilcum was ruptured or its contents effused. The most prominent, we might almost say pathognomonic indications of ruptured intestine, are the extraordinary prostration and collapse which supervene—the coldness, paleness, and depression—the feebleness of pulse—and, lastly, the almost universal fatality of the accident. In the case which is the subject of report, the depression had, in twelve or fourteen hours, passed away, and the symptoms altogether had not that intensity of character which they speedily assume in cases of effusion. That some degree of peritonitis was the consequence of the injury, (whatever that injury was,) is evident from the abdominal tension and pain, but the reader of the case cannot fail to be struck with the obstinate costiveness at first, and the immediate relief which was obtained, when the bowels were effectually opened. If we couple with this the gradual accession of the swelling of the abdomen, it is not too much to suspect that a purgative or enema administered earlier might have saved a few dozen of leeches to the belly, and some hours' uneasiness to the patient and surgeon.

49. HYDATID CYST IN THE LIVER, OPENING INTO THE RIGHT PLEURA.

[La Charité]

Case 1. A female servant, 42 years of age, was admitted into La Charité on the 28th of March, and placed under the care

of M. Fouquier. The colour of the skin was icteritious—the stomach was disordered—there was a dull pain in the right hypochondrium, and the liver could be felt beneath the ribs, whilst its left lobe especially was greatly enlarged, and reached to the level of the umbilicus; its surface was regular, but painful on pressure.

The history of the case was as follows:—Three years before she was admitted, she began to suffer pain in the right hypochondrium, accompanied with symptoms of indigestion. The pain, &c. subsided in the course of a little while, but reappeared at intervals afterwards. In March, 1827, the pains were severe, she lost her appetite, was attacked with fever, and the surface for the first time assumed an icteritious hue. Appropriate remedies were employed, and the symptoms disappeared, but left behind them debility, disorder of digestion, a sallow complexion, and white-coloured stools. Three weeks before she applied to the hospital, her sufferings were aggravated, the febrile disturbance was great, and she was troubled with vomiting of a bitter and yellow-coloured liquid.

The history of the malady and symptoms that were present left no doubt whatever that the case was hepatitis, chronic in the commencement, but degenerated into acute. The treatment consisted in bleedings from the arm, emollient ptisans, and antiphlogistic diet. The patient was relieved, but complained on the 4th of April, of bilious vomiting, pain in epigastrium, constipation, and sleeplessness. *Leeches to the anus—emollient glysters.* The vomiting of bile disappeared, but still there were nausea, dry coated tongue, quick and sharp pulse, hot skin, and scanty urine. The leeches to the anus were repeated, but on the 10th the vomiting returned with unabated severity, the emaciation was rapid, the countenance anxious, decubitus on the left side, attended with pain.

April 12th. The patient complains of excruciating pain in the right side of the chest. The respiration is hurried and oppressed, the cough very troublesome, and accompanied with expectoration, consisting of a mixture of reddish froth and thick green matter, which falls to the bottom of the pot. The respiratory murmur was distinct on the right side throughout; as much so, indeed, as on the left. The vomitings ceased, but

the patient continued to expectorate greatly; and on the 16th presented the following stethoscopic indications. The sound, on percussion, at the base of the right side of the thorax, is bad; the respiratory murmur gone, but the sound at the upper part is clearer than on the opposite side. During inspiration, coughing, or, when the patient speaks, a well-marked bruit amphorique is heard along the base of the scapula, the passage of air into the large ramifications of the bronchi is still distinguished; whilst reclined upon the back, the right side gave a tympanitic sound—the metallic tinkling was distinct behind.

From this period the patient continued to decline, the cough and expectoration were frequent, and the latter, a day or two before death, became more fluid and assumed a yellow tint; the respiration became so difficult, that the patient was obliged to be constantly supported in bed, and on the 25th of April she expired.

Sectio Cadaveris. The enlargement in the situation of the liver had entirely disappeared. On opening the abdomen, the right lobe of the liver was found to be changed into an extensive cavity, the walls of which were half fibrous, half cartilaginous, with a very thin layer of the proper parenchyma externally. This cavity was filled with a yellowish fluid, of a fetid odour, and a quantity of hydatid cysts, varying in size from that of a marble up to a large hen's egg. At the spot where the liver and diaphragm are in contact, without the intervention of the peritoneum, was an opening that would readily admit the fore-finger between the cavity in the liver and the right lung. This fistulous opening in the lung led partly into several ramifications of the bronchi, and partly, by another distinct aperture on the outside of the lung, into the cavity of the pleura. The lung was considerably reduced in size, flattened against the mediastinum, and extensively adherent to the diaphragm; it was almost deprived of blood and crepitated no longer. The pleura was inflamed, invested with a layer of lymph, and contained in its cavity a quantity of the same kind of fluid as was found in the liver, and a number of hydatids.

The left lobe of the liver was enlarged

and its substance preternaturally soft; the stomach and duodenum presented marks of inflammation. In the left ovary was a cyst, about the size of an egg, the walls of which were dense, and contained a liquid, in colour and consistence very similar to chocolate. The right ovary also presented a cyst, but its walls were transparent, and the fluid was limpid and colourless. The rectum, about three inches from the anus, was so compressed by these ovarian tumours, that its calibre was reduced to the space of half an inch.

The reporter remarks that the formation of hydatids in the liver cannot be considered a very rare affection, though the origin of the disease is involved in the deepest obscurity. When, however, the affection is advanced, the gentleman conceives that a careful and anxious examination will frequently detect its existence. The diagnosis is important, as the disease, though too frequently fatal, occasionally admits of relief from art, and even has been cured when it opened spontaneously across the abdominal muscles. In the celebrated case where professor Recamier hastened the opening of the sac by means of the *potassa fusa*, the *issue* was successful. In a case which occurred at St. George's Hospital, the cyst was either opened by the surgeon, or burst of itself, (we are not certain which) and a cupping glass was applied with the immediate effect of extracting an extraordinary quantity of hydatids. The patient died.

Had the existence of the cavity in the liver and its contents been inspected when the subject of report was admitted into La Charité, it would not have been a case, notwithstanding, for the interference of art. The total destruction of the right lobe of the liver, and the general condition of the patient would have rendered an opening in the walls of the abdomen peculiarly hazardous, and probably speedily fatal. The communication of the cyst with the bronchi and pleura, was indicated by the nature of the expectoration, and fully established by the evidence of auscultation and the stethoscope.

Case 2. Conversion of the Right Lobe of the Liver into a vast Hydatid Cyst—fatal Per-

tonitis. A middle aged woman ceased menstruating at 43, and shortly afterwards began to be affected with deep-seated pains in the right hypochondrium. The digestion was good; the pains only troubled her at intervals, and she paid very little attention to her case. In the course of last August, the pains became severe, the belly grew tumid, and the surface acquired a copperish tinge; the appetite, however, continued, and the digestion was unaffected. In October, the patient had diarrhoea for a fortnight, and from that time began to emaciate, and complain of loss of appetite. The diarrhoea returned several times, and in December, 1827, she entered La Charité, presenting the following symptoms; commencing marasmus—yellow tint of skin—tumefaction of the abdomen, and some degree of effusion into the cavity of the abdomen. The liver on the right side was felt below the ribs, and its left lobe extended as far as the umbilicus. The surface of the organ was smooth, and the pain was not increased on pressure; there was a very uncomfortable feeling of weight in the region of the epigastrium—appetite tolerable—digestion pretty good, when the quantity of aliment was small—pulse rather feverish—skin dry. Gum-water was ordered with nitrate of potash and frictions of hydriodate of potash, under the influence of which the dropsical effusion diminished. Leeches were applied to the anus, but on the 18th of January, the abdomen was painful and tense—the tongue dry and brown—the patient became delirious and on the night of the 19th she died.

Sectio Cadaveris. On opening the abdomen, two pints of serum were discovered in its cavity, and the peritoneum in several places shewed traces of recent inflammation. The liver had acquired an extraordinary volume, and pushed up the diaphragm to the level of the cartilage of the fourth rib. Its convex surface was smooth and covered with layers of lymph. The right lobe was converted into one enormous cavity, with thick and fibrinous walls, which was filled up with white, inodorous pus, containing in its centre hydatids of different dimensions and perfection. The parenchyma was totally destroyed on the concave surface of the lobe, on the convex a layer existed, from two to four lines in diameter. The left lobe was double its natural size, but its structure was

sound, and the gall-bladder was filled with bile, the composition of which was apparently sound. The stomach and duodenum were sound—the large intestines a little inflamed. The lungs were unaffected, the heart was small and flabby and contained some loose coagulum.

It is curious, though far from uncommon, that, notwithstanding the existence of organic disease in the liver, the appetite should have continued unaffected, and the operations of digestion, to all appearance, undisturbed, to a very late period of the patient's existence. It is probable, as the intelligent reporter suggests, that the cavity in the liver contained in the first instance, only hydatids, and that the purulent matter was formed at the time when the marked aggravation took place in the symptoms. From the healthy condition of the left lobe of the liver, the above would have afforded to the operator a much greater promise of success than the case at the head of the report. In the present state of knowledge, with regard to organic disease of the liver, we fear there are few who would venture from the catalogue of symptoms presented by this patient to plunge a trochar in the hypochondriac region on the speculation of arriving at an abscess or cyst of hydatids! Our only instructor is experience, a tardy but certain preceptor, and by means of the PRESS, the experience of one, if rightly recorded and faithfully studied, becomes the experience of many. With this object in view we have minutely reported the features of these interesting cases, and hope they may be useful in aiding a doubtful diagnosis.

50. AMPUTATION AT THE HIP-JOINT.

[Hôpital de Montpellier.]

There was a time, 'tis not sixty years since, when amputation of the hip-joint was considered by many as the *ultima thule* of temerity, and even inhumanity. Mr. Pott, in speaking of the operation, observed, "that it is not impracticable (although it be a dreadful one) I very well know: I cannot say that I have ever done it, but I have seen it done, and am now very sure I shall never do it, unless it be on a dead body." It is to the surgeons of the army and navy that science is indebted for its establishment, for al-

though it had been treated on, and even practised, previous to the late Continental war, yet then, and not till then, the experiments were made on such a scale, in our own and the enemy's ranks, as to entitle it to be considered a standard, though still very formidable operation.

The veteran Delpach has performed it with success at Montpellier.

Case 1. In the month of June, 1823, a young man applied at the hospital, with hardness and tumefaction of the right thigh and a number of sinuses leading in different directions to loose and dead portions of bone. Abscesses had formed and been discharged at different times, and left very great induration of the soft parts in their train. It was clear that there existed an extensive necrosis of the thigh, but the bone was affected too high to admit of amputation of the limb, and the constitution beginning to suffer from the local irritation, it was determined to perform amputation at the hip-joint.

As a preliminary to the operation, the femoral artery was tied. Instead of making two flaps, as had hitherto been done, M. Delpach had resolved to cut the inner one larger and longer than usual, and turn it over the acetabulum, so as in some measure to fill up the cavity by the great mass of muscle, and prevent, as far as possible, the access of air. This intention, however, he was unable to execute as completely as he wished. The inner flap was cut of a suitable size, by turning the knife from within backwards, so as to comprehend in its sweep the greater part of the muscles on the back of the thigh. The limb was in the next place, forcibly abducted, and the inner half of the capsule divided with the knife, but at this stage of the operation, the bleeding was so free from one of the collateral vessels, that a ligature was required, though the femoral artery had been previously tied. The thigh being drawn inwards, the knife was "set on" somewhat lower than the middle of the glutæi, and carried obliquely down to the capsule, so as to form an outer flap, but of trifling dimensions. The remainder of the capsule was divided, the head of the bone disarticulated, and the limb removed.

Two vessels only were secured at the second stage. The efforts of the surgeon were now directed to the closure of the wound as quickly as possible, its surface being such, that no one, in M. Delpech's opinion, could survive its suppuration. The infiltrated and consolidated state of the parts which composed the inner flap presented a considerable obstacle to its being drawn backwards, so as to cover the cotyloid cavity, but at length it was effected by means of perseverance. The interrupted suture was passed through the integument, (and integument only) and the flaps brought together, except at the outer part of the acetabulum, where they could not be got to unite. A compress of lint and a bandage completed the dressings.

The day after the operation, an abundant discharge of serous fluid took place, and completely soaked through the dressings. In the course of some days, however, it gradually ceased—the two flaps united by the first intention, except at the outside of the acetabulum, where a healthy suppuration took place, and, at the end of a month, the patient had completely recovered, with the exception of a trifling discharge.

In the course of last April, the man was presented by M. Delpech to the Royal Academy of Medicine. He appeared to be perfectly cured, and could walk with facility on his wooden leg.

Case 2. The issue of this was unfortunate, the patient refusing to submit to an operation till the favourable period was past.

The affection that induced M. Delpech to have recourse to so formidable a measure, was an old and ununited fracture at the upper part of the femur. Prior to the performance of the operation the patient was attacked with acute peritoneal inflammation, and though the operation itself was successful, the abdominal inflammation assumed a chronic character, and, unluckily, proved fatal at the end of eight months. There was none of the consolidation and thickening of the textures of the limb, which were present in the former instance, and, therefore, the surgeon was able to execute, fully the plan he had proposed. The flap on the inside was cut longer than before,

and the outer one was really no flap at all, the incision being curved, and nearly on a level with the crest of the ilium. The skin from the inside covered the glutæi muscles, the fleshy part of which was saved in considerable quantity, the adaptation of the parts on the face of the stump was complete, and, on the 20th day, the wound was entirely healed, without the most trifling suppuration! On dissection of the stump, after the death of the patient, the acetabulum was found to be filled by the soft parts that constituted the centre of the internal flap, the connexion between them being formed by the medium of a firm and condensed cellular tissue.

M. Delpech recommends the prior securing of the femoral artery, on account of the size of the vessel, and the "uncertainty of the measures adopted for the purpose of compression." His reason for not employing a flap on the outside as well as the in, is the little disposition to unite with the acetabulum which exists in the tendons of the glutæi, and the extreme liability to suppuration. It is important, in the opinion of the operator, to bury the acetabulum in the flesh of which the inner, or, more properly, the *only* flap is composed, which may easily be cut both as thick and as long as is desired, on account of the number of muscles that exist on the inside of the thigh. The comparative result of the first case, where a double flap was made, and the second, where there was only the one, is adduced as a proof of the evident superiority of the latter, with the view of preventing suppuration.

We leave the proposal to the consideration of such of the profession as are immediately interested in the question. To us it appears an important suggestion, and its coming from a practical man, who has operated twice with success, must give it some weight with his practical brethren. Whilst we join in the meed of approbation which was reaped by M. Delpech when he developed his sentiments, and shewed the living record of his skill, at the Academy of Medicine, we doubt, at the same time, whether the nature of one of the cases, at any rate, was such as to demand amputation at the hip-joint. The one we allude to was an instance of necrosis of the femur, and we see no good reason for not having amputated high in the femur, and removed the acquestra, if such had been found to exist. The medullary cavity of the femur

does not extend as high as the trochanters, and the neck of the bone is but seldom involved in the disease. On this account we are disposed to agree with Mr. Bell, and consider amputation of the hip-joint as generally uncalled for in cases of necrosis. If the neck and the head of the bone are diseased, the soft parts, we imagine, would be implicated too far to allow of much prospect of success.

In the case where the operation was performed with success by Mr. Orton, the thigh-bone was diseased in its whole length, and abscesses extended to the dorsum of the ilium; the result was more fortunate than the surgeon might expect.

The particulars of M. Delpech's second

case are so briefly detailed, that it is difficult to form any estimate on the necessity of resorting to the operation. Be this as it may, the operation itself must be considered successful, the patient surviving eight months, and dying at last from a different cause. These cases then, added to the number of those that are already upon record, make five that have recovered out of twenty-two; a proportion which is calculated to make the hip-joint operation by no means so desperate as it is frequently considered.

The Frenchman on whom Mr. Guthrie operated after the battle of Waterloo, we find, by the Journals, is still at the Hôpital des Invalides, and frequently referred to by Larrey!

51. HORÆ LACONICÆ.

No. 2.

NEW THEORY OF THE CIRCULATION.

HARVEY overcame many of the difficulties attendant on the circulation of the blood, and his doctrine, in all important particulars, stands established and confirmed by TIME. Some difficulties still exist, as to the return of blood by the veins:—and our intelligent countryman, BARRY, has done much to lessen these difficulties. It remained, however, for a personage who stiles himself—"FERD. LAU, *London*," to achieve what Harvey and Barry failed to do; and to shew that the GLOTTIS is the auxiliary agent to the HEART in the venous circulation! The theory is so beautiful, and at the same time so LACONIC, that it must have a place in the HORÆ LACONICÆ.

"Professor Mende (of Gottingen) published a little treatise on this subject, in which he says that the glottis is closed, and opened, alternately, by two bodies resembling the lips, in the act of shutting of which there seems to be some degree of power; and to make the closure still more complete, the epiglottis lays down on the glottis; likewise, as if by some muscular action, the closure takes place between each inspiration, and expiration, and lasts longest after the expiration.

"It appears, then, that during the closure of the glottis, the communication between the air-canals of the lungs, and the

external atmosphere, is entirely suspended; or that the closure is air-tight, which is also particularly favoured by the labial structure of the parts. Now it is my object to show, what the effect of this closure of the glottis must be on the circulation of the blood. We know that a part of the air is absorbed by the blood in the lungs; and are we, therefore, not entitled to conclude, that a vacuum is formed in the bronchi during the closure, and must not such a vacuum evidently have a powerful effect on the fluid blood, which thus, by atmospheric pressure, is compelled towards the vacuum? The pressure of the atmosphere chiefly acts upon the abdomen; the moveable contents of which, and the blood of the large veins, are pressed into the pectoral cavity, until the glottis is opened again, when the equilibrium is restored. This reasoning, I think, is founded on such indisputable principles, that there will be no difficulty in conceiving it."*

Whatever difficulty there may be in *conceiving* this reasoning, there can be no doubt that it is now happily brought forth—and a precious *conception* it is! When Dr. Barry sees this new AUXILIARY come into his ranks, he will probably exclaim—

Non tali auxilio, nec defensoribus, istis,
SANGUIS eget.

* LANCET, No. 255, p. 502.

52. CASE OF RUPTURE OF THE STOMACH PRODUCED BY VOMITING; WITH SOME OBSERVATIONS. By J. N. WEEKES, Esq. House-Surgeon to Bartholomew's Hospital.

[Med.-Chir. Trans. Vol. XIV.]

Rupture of the stomach, independent of external violence or internal disease, is so extremely rare an occurrence, that we question whether the present case be an exception to general experience. We shall state the particulars of the case, however, before we offer our reasons for this opinion.

George Andover, aged 34, had been liable, for about two years to paroxysms of pain in the stomach, generally ending in vomiting, and returning at uncertain intervals. Some of these intervals amounted to several weeks, during which the patient enjoyed tolerable health. About Christmas, 1827, he vomited "*a large quantity of blood,*" which rendered him so feeble that he was confined to bed for five weeks. From that period his health was much impaired, "and the attacks of pain, followed by vomiting, were more frequent." On the 13th April, 1828, he entered Bartholomew's Hospital, suffering great pain, extending from the epigastric region over the whole abdomen, and accompanied by nausea, but without tenderness on pressure, or tension. Pulse frequent, tongue clean. He attributed these symptoms to a draught of shrub and water. Next day the pain had subsided—no vomiting, but complained of nausea—abdomen distended—frequent eructations—pulse weak. At 11 o'clock, p.m. he had a sudden attack of severe pain at the pit of the stomach—the abdominal muscles hard and contracted—no tenderness of the abdomen on pressure—pulse small and feeble—extreme jactitation—great expression of suffering in the countenance. Laudanum was twice given; but the pain continued two hours, and ended in vomiting. He then sunk rapidly, and died at 4 o'clock in the morning.

"*Dissection.*—On opening the abdomen, the stomach was observed to be flaccid and empty, and its contents, which consisted of a large quantity of dark-brown fluid, were effused into the peritoneal cavity, through a ragged opening situated on its anterior surface, and near the oesophageal orifice. The rupture ex-

tended from below the lesser arch of the stomach to near its cardiac extremity, and was about four inches in length. The three membranes were not torn equally, the rupture of the peritoneal extending an inch farther than that of the muscular or mucous coat. On the posterior surface of the stomach was a laceration, measuring three inches in length; and there were two or three small ones, from an inch to an inch and a half in length, at its great arch. These lacerations extended only through the peritoneal coat of the stomach, the muscular and mucous tunics remaining perfectly whole. The mucous membrane of the stomach was lined with a great deal of dark-coloured secretion, *beneath which the membrane itself was of a deep red colour throughout,—its texture was softened and partially emphysematous.* The stomach in other respects appeared healthy,—the liver was pale and softened,—the gall-bladder contained a calculus,—the structure of the spleen was unusually soft,—the other viscera were healthy." 450.

Mr. Weekes considers the appearances presented by the inner coat of the stomach as merely indicative of "recent inflammation and *softening* of its texture." But, although *recent* inflammation sometimes produces this softening of texture, *chronic* inflammation much more frequently does the same. We think the history of the case, taken in connexion with the post-mortem phenomena, bears us out in our conclusion, that there was chronic disease of the mucous membrane going on for two years previously to the rupture. The intermissions of vomiting and pain offer no valid objections to this conclusion; for who does not daily see the most unequivocal intermissions of functional disorder, during the progress of fatal organic diseases? These intermissions are not mere exceptions to the general rule. They are positively more common than the reverse—that is, uninterrupted disorder of function where there is disease of structure in any organ. There is hardly a more prolific source of error among young practitioners than this intermission of symptoms. If, for example, a patient who is subject to pain and vomiting after taking food, has intervals of a week or two, without any pain or vomiting, the inexperienced practitioner concludes that there can be no organic disease going on

about the pylorus,* he will be very often mistaken. The sensibilities of this organ vary so much at one time from what they are at another, that no implicit reliance can be placed, either on the permanence or intermission of symptoms. In fatal scirrhus of the pylorus, we have frequently observed the sickness and pain cease for whole weeks—but the hardness was still felt on manual examination—the emaciation advanced—and the constipation continued. These and many other examples of the difficulties attendant on diagnosis, should induce the student—yea, and the practitioner, to get into the habit of employing every mean which science and experience have discovered to ascertain the true state of the case, instead of trusting to one or two leading marks, as laid down by systematic writers. These marks are nearly as often false as true.

53. OBSERVATIONS ON THE EFFICACY OF CUPPING GLASSES IN PREVENTING AND ARRESTING THE EFFECTS OF POISONED WOUNDS. By Dr. C W. PENNOCK.

Dr. Pennock, an American physician, has made an extensive series of experiments in the same line of research with our countryman, Dr. Barry, and has confirmed, in all material points, the facts and opinions of the latter physiologist. His conclusions are as follow :

"*First.* The usual effects of poisoned wounds cannot take place during the absence of the atmospheric pressure pro-

* "The symptoms, in this case were not such as generally indicate the existence of organic disease; there were considerable intermissions of the symptoms—the patient had enjoyed tolerably good health, and there was no emaciation."—Mr. WEEKES.

When we consider that he was so feeble after the hæmatemesis as to be confined to bed for five weeks, between Christmas and April—that, after that period, "his health had been much impaired," and that the attacks of pain and vomiting had been more frequent than ever, we hardly think Mr. W. is justified in saying these symptoms were not such as indicate organic disease.—REV.

duced by the application of cupping-glasses.

"*Second.* Such application does not arrest the deleterious action of the poison by withdrawing it from the exposed surface; on the contrary, the fatal effects are wholly prevented, though not a particle of the substance employed has been abstracted. In proof of this, if a poison in powder, (strychnine or arsenic for instance,) be conveyed by a tube through a narrow wound, in an oblique direction under the integuments to some distance from the opening by which it is introduced, and there deposited—and under these circumstances the glass be applied over this spot, where the skin is sound and unbroken, the wound being without the bounds of the glass, none of the poisonous substance will be removed, and yet no indication of its action will be presented during the time of the application of the glass.

"*Third.* The constitutional symptoms, such as tetanic convulsions, etc. are arrested by the establishment of a vacuum on the poisoned surface; then by removing the poison by an incision through the integuments, the life of the animal is preserved.

"*Fourth.* When the cupping-glass is applied over the opening made in the integuments for the purpose of introducing the tube containing the poison, and this is deposited under the skin beyond the circumference of the glass, none of the effects are manifested during the continuance of the vacuum, but as soon as the cup is removed, the action of the deleterious article commences.

"*Fifth.* If during the application of the cupping-glass, placed as just stated, an incision be made between its edge and the place at which the poison has been lodged, death will ensue as speedily as though the atmospheric pressure had not been removed.

"*Sixth.* If after the application of a glass for a given time, to the sound skin over the spot where the poison has been deposited, the glass be removed, death will then ensue as soon as if no such application had been made.

"This last position is entirely at variance with the observations of Dr. Barry.

He expressly says, that "after the glass had been taken off, the animal continued for one or two hours to carry im-

bedded in his cellular tissue a dose which would infallibly have destroyed him in a few minutes, had the cupping-glasses not been previously applied.

"I have repeatedly observed, however, that if the animal was abandoned to his fate after the glass had been removed, after an application of it for an hour or more, that death took place as soon afterwards as it ordinarily did when no vacuum had been formed. Experiment fifth is in confirmation of this fact."* 13.

The following additional quotation will not be read without interest.

"During the investigations herein detailed, my attention has been forcibly directed to the astonishing effects which are produced by the application of the cupping-glasses in arresting tetanic symptoms:—even where decided opisthotonos has been exhibited, we have witnessed a subsidence of the symptoms, by means of pressure thus applied. I therefore venture to propose it, as one of the means of combating that terrific disease, traumatic tetanus. This variety of tetanus appears to be occasioned by the injury sustained by the sentient extremities of the nerves of the part wounded. It has occurred to me that if these wounded and irritated nervous extremities could be paralyzed, the general spasmodic action, which is produced by the local irritation, would be arrested. *Would not pressure by weights, or ligatures, or the application of exhausted cups over the wound, or in its immediate vicinity, paralyze the sentient extremities of the wounded nerves, and thus suspend, and perhaps remedy, the general spasmodic action?*"

"If the constitutional symptoms should be arrested; as a security against their return, *before the cup over the wound is removed, an incision so extensive as effectually to remove the wounded portion of the nerves ought to be made.*" 25.

In the course of this investigation, some curious phenomena were observed. Thus, in one instance, having divided the internal jugular vein of a dog, for the purpose of introducing a tube, "jets of blood were observed to issue from the lower portion of the divided vein, at intervals which were synchronous with the expiration from the lungs."

"After this phenomenon had continued for nearly two minutes, the animal experienced great difficulty of respiration, and died very shortly afterwards, manifesting all the symptoms of strangulation. Upon dissection, the right ventricle of the heart was filled with blood, unlike that usually found in that cavity; being red, spumous, and apparently arterialized. The cause of the animal's death was now sufficiently obvious: the atmospheric air had entered the cavity of the heart through the divided vessel.

"Another circumstance connected with the venous circulation, is also worthy of being mentioned. In an unsuccessful attempt to repeat the celebrated experiment of M. MAGENDIE, on venous absorption, one of the platina tubes by which it was intended to form the channel of communication in the femoral vein, was forced so far upwards within it, as to be beyond our reach. Upon searching for the tube, it was found as high as the right auricle of the heart!! This tube was two and one eighth inches in length, and weighed thirty-two grains.

"Assisted by Mr. CHEW, student of medicine, I afterwards introduced into the right femoral vein of a sheep a platina tube, one inch and one fifth in length and weighing nineteen grains. The animal did not subsequently manifest any symptom of pain or uneasiness. He was killed about thirty minutes after the insertion of the tube: upon examination, the tube was not discovered in the entire tract of the iliac vein, nor in the ascending cava, nor even in the right auricle of the heart. It was finally discovered, however, in the larger lobe of the left lung." 26.

In the first experiment, it is evident that the vessel was entirely divided, and, therefore, it can hardly be contended that the platina tube was carried towards the heart merely by the *vis a tergo*. There was something like suction here. The second experiment probably did not comprehend entire section of the vessel, and, therefore, the current of the blood in the vein might not have been completely interrupted.

54. CURIOUS CASE OF MONOMANIA IN A MEDICAL GENTLEMAN.

The old doctrine, that mania and mono-

* American Journal of the Medical Sciences, No. 8.

mania are not necessarily connected with any corporeal derangement, begins at last to totter, though still strenuously maintained by many talented modern physicians. As great disorder of function frequently exists without apparent change of structure, these advocates of immaterial insanity argue as did the late Dr. Parry of Bath—"de non apparentibus et non existentibus eadem est ratio." But this is a very dangerous as well as fallacious rule to go by in pathology. Who has discovered the material change which produces tetanus? Yet who will be so bold as to say that it is a disease independent of material change, though that change is incognizable by the senses?

Dr. Scott, of Cupar, Fife, has lately published a curious case of MONOMANIA, the perusal of which led to the foregoing reflections. The subject was a navy surgeon, (John Anderson, M. D.) who, being placed with many others on half-pay, after the downfall of Napoleon, came to reside in his native town of Cupar. His manners and acquirements caused his society to be courted; but, as he tried several times to settle in practice, and was always disappointed, he became liable to fits of despondency. In 1820, five years after his discharge from the public service, his eccentricities of thought, especially on one particular subject, were remarked by his friends. He had been diving into the mysteries, not to say the absurdities, of animal magnetism, and at last became convinced that he himself was subject to its powerful influence, exerted by some of his best friends. He now became sleepless—or, if he slept, he was the victim of those "terrores magici," conjured up by oppressive and phantastic dreams. Certain individuals could wield at will a malignant influence over him, so as to deprive him of all rest and enjoyment. To escape these *invisibles*, as he termed them, he went to Paris, in the year 1822, but his magnetic enemies soon mingled with the gay crowds on the Boulevards! In the night, these inexorable fiends would press on his breast with the weight of a millstone, disturbing his sleep and locking up his bowels:—At other times, they directed their evil influence to the bladder or rectum, so that he would not have time to undress himself before their contents were discharged. On some occasions, these tormentors

would take such unwarrantable liberties with him, that he was forced to roar aloud—and, several times, he applied to the local authorities for protection. On all other subjects, he was perfectly sane—on this point, he was decidedly mad. In process of time, however, he began to evince symptoms of something more than imaginary hallucination. His memory, in some particular points, failed him. He had the ideas apparently in his mind, but he could not clothe them in words. Having experienced several attacks of pneumonia, he became subject, for several months before he died, to a short dry cough, with severe pain in the back, oppression and tightness across the chest. On the day of his death, he had invited some friends to dine with him; but just as they were sitting down to the repast, their host began to cough up large quantities of blood, and, in a few minutes, he died suffocated.

Dissection. There was a large aneurism of the descending thoracic aorta, shewing the usual fibrinous matter, in concentric layers, which had pressed upon the roots of the bronchia, and eroded some of the dorsal vertebræ. This aneurism had burst into the trachea, and thus caused sudden death. In the head, there was found an inflammatory deposit, apparently of long standing, under the arachnoid coat, with thickening of the membrane itself, and adhesion to the parts beneath, about the space of an inch and a half in length, and one in breadth, on each side of the longitudinal sinus, midway between the *crista galli* and the level of the commencement of the lateral sinuses. No other change of structure could be detected.

It would be difficult to determine, in this case, to which of the corporeal lesions the monomania was attributable, though we have little doubt that it was connected with one or both of those above described. We have so often observed the mind to be partially deranged by affections of the heart and great vessels that we suspect the gradual pressure and destruction of parts around the aneurism to have played an important part in the production of those various morbid feelings by which Dr. Anderson was harassed, and which were considered to be purely imaginary by his friends. We would not say that the hallucination was

the direct effect of this disease; but we conceive that this change of structure going on within the chest might very readily disorder the functions of the brain, and disturb the intellect. How far the locality of the chronic inflammation in the brain was connected with the monomania or partial insanity, we leave for the speculations of the phrenologists. It certainly is very difficult to account for a partial disturbance of function in an organ, without supposing a local derangement of structure.

55. MEMOIRE SUR LA FOLIE DES IYROG-NES, OU SUR LE DELIRE TREMBLANT. Par le Docteur LEVEILLE.

MEMOIR ON DELIRIUM TREMENS. By Dr. LEVEILLE.

[Memoires de l'Academie Royale de Medecine. Tome Premiere.]

Much as has been written on DELIRIUM TREMENS, the disease is every day mistaken, mistreated, and rendered fatal by confounding it with inflammation of the brain or its membranes, to which it certainly bears much resemblance in many particulars. The memoir which we are now to notice, is rather an extended monograph, in the first volume of the Royal Academy's Transactions, and is the production of a man of talent and observation. There are some novel views as well as important facts in this Essay, which are deserving of attention.

1. Description of the Disease—Action of Alcohol on the Encephalon and Stomach—Cerebral Neuroses, which simulate Delirium Tremens.

Sometimes cephalalgia, or a tightness and uneasiness at the epigastrium, with vomiting—sometimes a rambling of ideas, or indescribable condition of the intellectual faculties, are the precursory symptoms. But most commonly the delirium bursts forth at once, during or soon after a debauch. It is mild or furious—continued or remittent—and the daily occupations of the individual form the theme of his incoherent and loquacious discourses. The minute symptomatology of this curious disease we shall not detail. The general inquietude, want of sleep, tremor,

irritability, quick pulse, white tongue, cool skin, ferretty eyes, incoherent ideas, and perspiration, are the prominent features of the disease.

Of the spontaneous termination of delirium tremens by a return to complete sanity, our author cannot speak. When the disease is simple, and properly treated, it is not mortal, in his practice. If left to itself, it diminishes in intensity, but generally ends in insanity—and this again in fatal apoplexy, presenting, on dissection, a serous effusion in the brain. Opium, in large doses, never failed to cure simple delirium tremens, at whatever period of the disease it was administered. Convalescence was so rapid, that the patients were able, in general, to resume their ordinary avocations in a few days.*

"I have seen (says the author) four patients, in one of whom the disease had lasted three weeks, and was cured in 24 hours, by proper treatment; in the second, the complaint had continued six weeks, and was speedily subdued at last. In another case, where the delirium was of some weeks standing, the patient became calm and rational before he had quite finished an opiate mixture that had been prescribed for him. In all, there could hardly be said to be a state of convalescence—a proof, the author thinks, that the disease was a simple "ENCEPHALOPATHIA NERVOSA," unattended with in-

* Delirium tremens has not proved quite so tractable in our experience. Nevertheless it is often cured by opium, if depletion has not been too actively employed. An exquisite case of this disease was lately attended by the writer of this article and Mr. Fincham, of Spring Gardens. The patient (a gentleman) had drunk very hard, principally of brandy, for some months previously, when delirium tremens burst forth, all at once, and in a very unmanageable form. The patient slept not a wink, and it was with difficulty he could be kept from rushing into the streets. He vomited up almost every thing he took, and his pulse was upwards of 120, small and hard. A few doses of calomel and opium brought sleep, allayed the vomiting, and reduced the delirium. We are convinced that one full bleeding would have destroyed this gentleman's life.—REV.

Inflammation of the brain, its envelopes, or the alimentary canal.

M. Leveillé next enters into a consideration of the question, whether or not the disease may be produced by the absorption of alcoholic molecules, emanating from spirituous liquors, and applied to the mucous surfaces of the respiratory apparatus? Some cases of a doubtful nature are stated, and it is pretty evident that the author does not credit this *modus operandi*. There can be no doubt, indeed, that people may be overcome, and rendered apparently intoxicated by alcoholic vapours inhaled into the lungs; but this is not delirium tremens. The ingurgitation of ardent spirits, however, is another thing. In this case, alcohol is unquestionably introduced into the torrent of the circulation, and applied to the sensorium itself. In the course of fifteen minutes after the injection of some brandy and water into the stomach of a dog, M. Magendie found the blood of the animal exhale a strong odour of the brandy. The muscles, the breath, the sweat, the urine of people who are much addicted to spirituous inebriation, are said to be impregnated with the odour of spirit.

"A cerebral *neurosis* (une *nevrose* *cerebrale*) may simulate DELIRIUM TREMENS, and yet be a very different affection, as far, at least, as the *cause* is concerned. I have attended four individuals, who apparently laboured under DELIRIUM TREMENS, and who were cured by the remedies employed for that disease. On an accurate investigation, I found that none of these patients had had access to intoxicating liquors."

These four cases are succinctly stated; but they are not quite satisfactory—at least the first on the list, who, though reputed a very sober chap, was yet in the habit of drinking *two bottles of wine* daily. Is true the wine was French, on which (as the Irishman says in the play) "it is quite hopeless to get drunk." Yet, we think that two bottles of "VIN ORDINAIRE," are quite sufficient, in certain constitutions, to generate a very strong disposition towards DELIRIUM TREMENS.

2. *Delirium Tremens, complicated with "Determination of Blood," (Coup de Sang) or Arachnitis.*

Are we not (says the author) justified

in supposing that isebriation may sometimes cause such a turgescence of the cerebral vessels as may end in arachnitis? If this be admitted, the delirium which succeeds is that dependent on inflammation, and not on that peculiar state of the sensorium, in delirium tremens, which we have supposed to be produced by the circulation of alcoholic molecules in the blood. We have no reason to doubt that the two states may be combined, thus offering a complex disease, presenting opposite indications, and proving extremely difficult to manage. M. Leveillé relates two cases shewing a continuance of delirium after the removal of all signs of cerebral turgescence by depletion. We shall just glance at these.

Case 1. A man, aged 55 years, gave himself up to intoxication, in consequence of some domestic troubles. After a bacchanalian orgie, he had an epileptiform attack. Next day (28th May) a mustard pediluvium was ordered, and a dozen of leeches to the sides of the neck. The leech-bites bled profusely—all symptoms of cerebral compression vanished—but delirium came on. 30th. Severe cephalalgia—face red—conjunctivæ injected—eye-lids moist and swelled—violent irritability—refusal of drink—strong pulsation in the carotids. A deep seton having been introduced in the nucha, there was a profuse hæmorrhage from the part. Ice was applied to the head. In the evening the patient was calm and pale. The strait-waistcoat was removed; but the patient soon attempted to escape, and was secured. 31st. There was delirium when fatigued by questions. Two tepid baths. In the evening he was calm; but in the night he was furious. 1st of June, took two grains of tartar emetic, which vomited him. He was alternately calm and delirious. On the 2d of June, the delirium entirely left him, and he rapidly recovered.

Case 2. A servant, aged 33 years, strong and athletic, got drunk on the evening of the 28th May, and went to bed in that state. Next morning he was found apoplectic, and lying on the floor of his room. He was bled from the foot. On recovering from the apoplectic seizure he became delirious, and even furious. This state continued till the 21st of June,

when he was received in the *MAISON DE SAINTE*. An emetico-cathartic mixture was exhibited next morning, and operated well. In the night he was more than usually unruly. 23d. Eye fixed and prominent—face flushed—eye-lids swelled—conjunctivæ injected—tongue red, and moist—pulse quick, full, and hard—abdomen contracted—constipation—urine copious—constant delirium and agitation. A deep seton was inserted in the nucha, and bled most plentifully. 24th. Less delirium—the pulse reduced. Ten leeches to each side of the neck—two warm baths. He had some sleep in the course of the day, and the bowels were opened. 25th. Tongue red at the sides and coated in the middle—pulse small and feeble—tetanic rigidity of the flexor muscles of the wrist—great agitation at night. 26th. Escaped from his bed, but was secured. In the evening he was rational. 27th. The delirium has returned. In the course of two or three days more the mind became tranquil, though there was an astonishing emaciation of the body. He was discharged cured on the 7th July.

It is remarked by the author that, in both these cases, the delirium was rather increased than relieved by the sanguineous depletion which must have taken off the turgescence of the vessels of the brain—and hence he naturally concludes that the delirium in this disease is not the delirium of meningitis. Nevertheless the two states may co-exist, and form, in fact, a very troublesome complication.

3. *Delirium Tremens complicated with Gastric or Enteric Irritation or Inflammation.*

The school of Broussais on the Continent attribute the affection of the sensorium, in this disease, to sympathy with the stomach or bowels. The disciples of Abernethy would say the same in this country. Nevertheless, our author can only see a coincidence, and not a cause in the gastro-enteric irritation. There can be no doubt indeed that the stomachs of drunkards are in a bad condition; but if delirium tremens depended on derangement of the digestive organs solely, we should have the disease much more frequently in practice than we now have. A great number of cases are related by M. Leveillé to shew that the cerebral

and abdominal disorders are independent of each other; but these we need not notice in this place. The following are the conclusions to which our author has come.

"The mania of drunkards (*mania a potu*) is no other than delirium tremens"—excess of inebriating potations is the efficient cause.

"This delirium consists in exaltation of the vital powers of the brain, excited by alcoholic molecules absorbed from the surface of the stomach and bowels, and carried into the torrent of the circulation. It is very doubtful whether or not these molecules, applied to the air-passages, are capable of producing such an effect. It is also very doubtful whether the disease has ever taken place without the application of ardent spirits, or other intoxicating drinks.

"There are some cases on record, and some of the first cases treated by myself, where there seemed reason to believe that the delirium resulted from determination of blood to the head—from acute, or from chronic meningitis; but as the general cause was applied, in these cases, I am persuaded that the delirium was independent of the congestion or inflammation about the brain.

The disease assumes a chronic form in some elderly people, who generally die apoplectic and maniacal at the same time; there are found, on dissection, serous effusion, thickening of membranes, and other appearances usually remarked in the brains of the insane.

"The complications of this disease with gastritis and entero-gastritis are very frequent. The mental hallucination is the first symptom which is perceived:—it gives way to opium; but the gastro-enteric affection pursues its course. They are independent complaints."

56. CASE OF CATALEPSY, COMBINED WITH MANIA. By Dr. BURROWS.

We remember hearing a remarkable and highly interesting case of catalepsy combined with mania, read at the Medico-Chirurgical Society, about three years ago, and wonder much that it was not published, seeing that many cases of far inferior interest have seen the light through that

channel. On looking over Dr. Burrows' late work on insanity, we recognized the case, and find that the patient had been in Dr. B.'s asylum while afflicted with her distressing malady. As it involves some important etiological and pathological considerations, we shall condense its most important features in this article.

Case. A young female, of education above her situation in life, (which was that of a house-keeper,) after being tempted to live in concubinage, had the proffer of marriage, provided the ceremony took place the very next day after the proposal. The agitation of mind, on this occasion, brought on a premature eruption of the catamenia, and in this state the marriage was solemnized, though with great reluctance.

"The new-married couple set off in the evening, to travel in a stage-coach to the place where they were to sleep. During the journey her passions were highly excited, and subsequent intercourse was attended with much pain. After having slept about an hour, she suddenly awoke in a violent alarm, saying, she had had a frightful dream, and then complained of a dreadful pain in her head. Presently she jumped out of bed and flew to the window, which her husband fortunately prevented her from opening; she then for a short time was unconscious of all around her, and fainted. On recovery, she became delirious and furious. The catamenia ceased from this time."

The medical practitioner who was called in, bled, purged, leeches, blistered, bathed, and starved the patient—and, in about three weeks, the symptoms gradually abated. A visit from her husband, at this juncture, together with indiscriminate communication with friends, produced a relapse, and mania, though in a mild form supervened. This subsequently changed to melancholia. In a fortnight after this she was removed to Dr. B.'s establishment. Her countenance was sullen and pallid; the eyes heavy, turgid, and cast downwards; the tongue foul; bowels inert; the pulse rather full and slow; the surface of the skin, and especially the extremities, below natural heat. She answered few questions, and those only in monosyllables; and she was very averse from moving. The patient was

observed to make frequent pressure on her head, and the carotid arteries beat stronger than any others. The sinapism was hotter than natural, and the extremities were cold. The head was shaved—the occiput cupped—and cold lotions applied to the vertex. The bowels and stomach were cleared by purgatives and emetics. This was on the 10th November. On the 24th, some ptialism came on from calomel that had been taken, and all the symptoms were greatly ameliorated. On the 8th December the ptialism ceased, and all the bad symptoms speedily returned.* On the 18th December we find her assuming the cataleptic character.

"She preserves the exact posture, whether lying, sitting, or standing, in which she is placed; eats mechanically whatever is put into her mouth; if spoken to sharply, the only notice is a sardonic grin. The skin resembles white wax or marble, and is again colder than natural; feet very cold; pulse feeble; respiration undisturbed and scarcely perceptible; eyes fixed and turned upwards; alvine dejections natural; sleeps well, and when taken up in the morning, is dressed like a helpless infant."

There was little change during the next fortnight. During the cataleptic paroxysms, the carotids were observed to beat with great quickness and strength, while the pulse at the wrist was feeble and slow. This circumstance is utterly unaccountable, and nothing but the assertion of Dr. B. would induce us to believe it. If we saw the fact ourselves we would distrust the evidence of our own senses.

On the 1st January all the symptoms were suddenly aggravated. She became a perfect statue; sensation and volition were quite suspended; the evacuations were involuntary; there was a constant sardonic expression in her features; mouth open, and a large quantity of saliva flowed unrestrained; the eyes were immoveable, and embedded in the upper eye lids; every limb retained the position in which it was placed; even the most

* We think Dr. B. might have taken a useful hint from the above accidental occurrence. We should have been inclined to keep the patient under the influence of mercury for some weeks.—*Rev.*

painful was endured without any apparent suffering, and that for a space impossible to be preserved by any one in health. She resisted every attempt to rouse her by moderate pinching and pricking. These paroxysms, varying in intensity, lasted through the day. She now exercised but one voluntary animal function—deglutition. Various remedies, including local depletion from the head and spine, were employed, but with little effect. On the 12th February, “she arose in the morning in possession of every faculty, both corporeal and mental.” She voluntarily assisted in domestic affairs, and talked rationally. She had a perfect recollection of all that passed prior to the attack of catalepsy—all since was a blank. It was mortifying to find her torpid and mute the next day. She was cupped and vomited—and a seton was inserted in the nape of the neck. At this period she removed from Dr. B.’s asylum, but he learnt that she derived very great benefit from the seton—that the menses re-appeared—that she perfectly recovered—and has since borne several children.

“Many circumstances in this case indicate determination of blood to the brain: the interruption of the menstrual flux, the discordance between the force of the carotid and radial arteries, and the temporary relief always produced by abstracting blood by cupping from the head during the existence of the cataleptic symptoms support this inference.” 191.

We believe there is not a case on record which more distinctly shows the operation of moral causes in deranging the corporeal, and through them the intellectual functions. The case is altogether very remarkable and instructive.

57. HYDROTHORAX.

No disease is more common in the mouths of medical practitioners than HYDROTHORAX—none is more rarely to be found, as a primary or original disease. But this is not the worst part of the business. In three-fourths of those cases denominated hydrothorax there is no water in the chest at all, but merely an inflammatory engorgement of the lungs, to be cured by the lancet rather than by squills and digitalis. In confirmation of these re-

marks, we shall here introduce an extract from a lecture lately delivered by Dr. Stokes, to the students at the Meath Hospital, Dublin.

“Before I speak of the latent affections of the lung, I shall allude to an application of the stethoscope, as important, perhaps, as any of those I have described. Every one has heard of *hydrothorax*, or *water on the chest*. The disease and its symptoms have been described in the different works on the Practice of Medicine; nay, further, books by grave and learned men have been written on this disease; cases have been detailed, and dogmata inculcated. Corvisart was the first who showed that idiopathic hydrothorax was a disease of extreme rarity, and that when serum was found in quantity in the cavities of the pleura, we should not consider its accumulation as a disease, but rather as the consequence of some antecedent affection of the lungs or heart. The immortal Laennec has further established this proposition, and has proved to demonstration, that hydrothorax can scarcely ever be considered as a primary disease.

“It is as amusing as it is extraordinary, to find, that even now, when so many years have elapsed since the publication of the work of Corvisart, many medical men are to be found who would consider this statement as absurd, who still continue to be guided, or rather mis-guided, by the writings of Cullen and Maclean, who consider every case of cough, difficulty of breathing, lividity of the face, orthopnoea, scanty urine, and swollen extremities, as hydrothorax, when, in fact, a moment’s application of the stethoscope would show that they were mistaken.

“Many of these cases, as has been stated in the Report of the Hospital by Dr. Graves and myself, have been sent into us as cases of hydrothorax, but in no one instance have we found this statement correct. Many of them we might, indeed, state, had serous effusion in every part of their body, save and except in the cavities of the pleura. Some of these cases were instances of chronic bronchitis, terminating in that dilated state of the pulmonary cells, called emphysema by Laennec; others were cases of this affection, complicated with disease of the heart; but the great majority were

cases of chronic pneumonia, mistaken and maltreated from the very commencement; mistaken in consequence of men adhering to the definitions of the older writers, and maltreated by their trusting to the diuretic plan, and neglecting to overcome the disease in the first instance. By the stethoscope such cases can at once be detected, and distinguished from hydrothorax. As I stated in the former part of this lecture, whenever effusion takes place into the cavity of the pleura, the sound of respiration becomes diminished, and ultimately ceases in the affected part.

"We have had many patients in whom after death, a large quantity of fluid was found in the cavities of the pleura; yet we know by the stethoscope that this effusion did not take place until within a few hours of the fatal event. The patients died with hydrothorax, but not of it. This important fact, discovered by means of the stethoscope, has thrown a new light on such cases, and has enabled the physician to save life, where, without this knowledge, it would be inevitably lost.

"Observe now what an important error you may fall into by trusting to the descriptions given by the older writers. You get a patient with dyspnoea and orthopnoea, swelled legs, scanty urine, and every other symptom of hydrothorax, according to Maclean, Cullen, and Good, and you commence giving him squills, nitrous ether, and digitalis, and your patient gets worse and worse, till at length you apply the stethoscope, and find that there is no hydrothorax at all, the disease being, in fact, pneumonia, and calling for the employment of the lancet and other antiphlogistic means. These, gentlemen, are undeniable truths, which many of you must have seen exemplified again and again in our wards. Many of the cases recorded by Maclean are nothing but chronic pneumonia, proved, in fact, by his own dissections."

We recommend the foregoing observations to the attentive consideration of those LIGHTS OF THE PROFESSION, who *are*, or rather *have been*, perpetually sneering at the stethoscope, as a bauble—an "inutile lignum"—a piece of quackery, &c.

58. SERIES OF CASES EXEMPLIFYING THE INFLUENCE OF ERGOT OF RYE ON THE HUMAN UTERUS. By W. MICHELL, M.R.C.S.*

Mr. Michell appears to have given the ergot of Rye a far more extensive trial than any English practitioner, and as the results of his experience are detailed in a very unostentatious form, and bear intrinsic marks of authenticity, we shall, in this paper, offer our readers a condensed view of the facts contained in the 10th chapter of the work—a chapter dedicated to the narration of 31 cases.

Case 1. Mr. M. was called to a labour at 2 A. M. and found the os uteri the size of a shilling—the pains had been quick and grinding, but now easy. He waited ten hours, and then infused half a drachm of ergot of rye in four ounces of boiling water. This was taken at ten minutes past noon. In 14 minutes she had a pain, and exclaimed—"clap a hand, or the child will fall to the ground." The head was found on the perineum, and the child was born before the pain was over. This was the woman's 12th child. The placenta was expelled before Mr. M. could tie the umbilical cord. The child was living.

Case 2. To this labour he was called at 1 A. M. It was her sixth child. The pains had nearly left her—the os uteri was not dilated—and the labour had apparently gone off. Mr. M. waited seven hours, and then gave the ergot. In fifteen minutes a pain came on—in 34 minutes from the exhibition of the medicine, the child was born. The dose was half a drachm, as before, in infusion.

Case 3. This was a lingering labour, and Mr. M. gave the ergot, as above, but it failed; and in 20 minutes the dose was repeated. In a quarter of an hour after this, she had sharp pains. In half an hour, they were very strong—the os uteri was the size of a crown-piece. In two hours delivery was effected. The child had been evidently dead for some time.

* On Difficult Parturition.

Case 4. This was also a lingering labour. After repeated visits Mr. M. found her with pains, but the os uteri was not larger than a sixpence. Half a drachm of the ergot was infused, and given with a third part of milk. In 13 minutes the pains were altered in character. In half an hour, the os uteri was dilated the size of a wine-glass, and the pains were expulsive, and continued till the child was born.

Case 5. Mr. M. was called at 5 in the morning—pains severe—no dilatation of the os uteri. These pains, apparently expulsive, continued all the day, and opium was twice given. At 12 o'clock the os uteri was still undilated—the same at 8 in the evening. It was her first child. The ergot was sent for, and administered at midnight, in the 3ss. dose. In 18 minutes the woman put on the Hippocratic face, and exclaimed that “her bowels were cutting in Twain.” At half-past 12, the os uteri was found a little dilated—at 1 o'clock, it was the size of a wine-glass—at half-past 1 the head bore firmly on the perineum—and delivery was effected in two hours and eighteen minutes after taking the ergot. No flooding or any disagreeable symptom followed. Our ounce of brandy is always given by Mr. M. immediately after delivery.

Case 6. Mr. M. examined a female at 4 o'clock, p. m. and found the os uteri undilated—the waters broken some hours previously—the vertex presenting—pains slight. Foreseeing that the case would be lingering, he gave her 3ss. of the ergot in infusion. This was at 5 o'clock. In 14 minutes a smart pain came on, and was succeeded by others without intermission. In 40 minutes, the os uteri was the size of a shilling, but firm. In 90 minutes, it was the size of half-a-crown—in 2 hours and a half it was the size of a tea-cup—and in 40 minutes more, the delivery was effected.

Case 7. Mr. M. was called to a case where the face presented, the pelvis being capacious. By way of experiment, the ergot was administered. The medicine quickened the pain in a quarter of an hour. In an hour, the pains were excessive—the os uteri fully dilated—but the uterus

was unable to propel its contents. In three hours, a second dose was administered. This again roused the uterine action, which continued for an hour, but without effect. The child was then turned and delivered. The child was dead.

“Here an objection may be taken to turning, after ergot has been administered, but I found it not at all more difficult than usual. Again, it may be surmised by those who are adverse to the use of ergot, that this child was killed by the *poisonous effects* of the ergot, and as the whole case affords the strongest possible refutation of such a supposition, it was fortunate that I was induced to make the experiment which I have just related. On laying my hand on the lower part of the abdomen, every part of it appeared as full and tense as before the delivery, and on passing up the finger I found on examination another Child in utero. As the pains did not come on, I hesitated whether to have recourse to turning or to give another dose of ergot, but soon decided in favour of the spurred rye, of which I administered ℥ii. In five minutes it had its usual effect, and in nine minutes and a half a fine healthy child was pushed into the world. Now this was five hours and fifty minutes from the first administration of the ergot, and one hour and forty minutes from the second, and nine minutes and a half from the last dose; in all, this patient took two drachms, wanting one scruple. Now the death of the first child would certainly have been attributed to its being ergotised, and thus poisoned. But I consider it a very fortunate answer to those who suppose still-born children to have been injured by the ergot. Such a notion has arisen merely from the circumstance that ergot is seldom given except in cases in which the children are frequently dead-born, either from laborious accouchement, or from the pressure on the child's head. It may be objected, and with great propriety, that I ought not to have given the rye at all in this case, but I was desirous of observing its effects, if allowed to exhaust itself, and whether any injury would result from it in wrong presentations, and from this case we may observe, that it exhausts itself in about three or four hours.” 91.

Case 8. Called at 7 o'clock, A. M.—

grinding pains—but no progress. These pains continued more or less, from the 12th of February till the 7th of March. At 8, A. M. the pains were severe. On examination, the os uteri was found to be long and soft, not open enough to admit the finger—the water dribbling away. Mr M. remained all night. At 3, P. M. next day the os uteri was still undilated. Opiates had been several times given, without any good effect. At half-past 3 gave the ergot. At 4, the pains were very severe and cutting. At 20 minutes past 5 the os uteri was dilating—at 6 the head was forced on the perineum—at a quarter-past 7 delivery took place. The child was dead.

"The head was elongated eight inches and a quarter in length, and three inches in circumference. Had not the child died I do not think the delivery would have been effected without the aid of instruments, as the head, had it been living, would not have been moulded into its peculiar shape. This woman was forty-five years of age, had been married twelve years, but never pregnant until this occasion. In this instance the ergot was given after waiting many hours without the least hope of a conclusion in less than forty-eight hours; the circumstances were certainly very unpromising, for its having a good effect, but here its influence on the uterus was greater than I expected, the delivery being effected in three hours and three quarters, and without doubt greatly accelerated by the ergot." 94.

Case 9. Called to a woman at 9 o'clock in the morning. Throes strong, and, to appearance, expulsive—os uteri undilated. These pains continued till 4, P. M. when the os uteri was still close—the cervix uteri not obliterated. Half a drachm of the ergot was given. In 13 minutes, the throes were more expulsive. At 5, the pains were constant—at half-past 6, delivery. This was a first child.

Case 10. Sent for at 1 o'clock, 5th May, 1818—pains smart, but with intervals of an hour. At half-past 2 gave the ergot. In eight minutes there was a pain—another in twelve, which continued five minutes, "when the child was expelled to the astonishment of all present."

"This case I marked as particular, as the Os Uteri was dilated only about the

size of a shilling when the ergot was given, and the delivery was effected before any thing could be procured to tie the cord." 96.

Case 11. Mr. M. was called on the 26th of June, 1827, to a woman in labour of her eleventh child, at half-past 8 o'clock. Waited till 10, the pains being very slight, during which the waters were discharged. At 20 minutes past 10 the ergot was given. At 40 minutes past 10 the throes were severe. On examination, it was found to be a breech-presentation. In 47 minutes the child was born alive and well.

"Had this child been born dead, as is frequently the case in unnatural presentations, the ergot would have been again condemned. I have given this case, although it contains nothing particular beyond scores I could record, except that it was a breech-presentation, and that all her other labours had been lingering. As I had not attended this patient before, I was not aware of this circumstance, or I would not have waited two hours. These cases I consider quite sufficient to explain the *modus operandi*, and to establish the utility of ergot." 104.

So think we. Our obstetric brethren will not, we think, be slow to have recourse to this valuable accelerator of parturition. If it maintain the character which Mr. Michell has given it, the practice of midwifery will lose more than half its drudgery, and medical men will save an immensity of time into the bargain!

59. YELLOW FEVER AT PLYMOUTH.

Thirty years ago the above heading to an article would have startled John Bull from Dover to the Orkneys, and put Plymouth in quarantine. But the dread of contagion is now much subsided, and the Bulam fever, the yellow fever, the "NOVA PESTIS" no longer excites terror, even in the non-professional mind. It is not often, however, that a fever answering so completely to the dreadful transatlantic scourge, as the following, is seen on our gloomy shores. It is recorded by Mr. Niell, surgeon of His Majesty's ship *Britannia*, a gentleman well acquainted with West India diseases.

The subject was messman to the officers of the ship—of sanguine temperament—addicted to eating and drinking freely—and exposed to the vicissitudes of the seasons. The summer of 1826, was almost tropical in this country, and, on the 8th of July, the patient was seized with rigors, succeeded next day by violent pain in his back, head-ach, and great prostration of strength. He did not apply for assistance till the morning of the 11th, when there was high fever, and 28 ounces of blood were abstracted and produced syncope. There was no inflammation evinced by the blood. 12th. Much nausea and vomiting—*pain in the right hypochondrium*. To take calomel every four hours. 13th. Nausea—skin of face and neck turning yellow—burning sensation at the pit of the stomach, and in the direction of the œsophagus. 14th. Nausea distressing—yellow tinge of the skin deeper—singultus—slight coma. Calomel every two hours. 15th. Black vomit resembling coffee grounds—skin of a deep yellow—pulse 120—singultus—bowels purged. Took a bottle of sherry and half a pint of brandy, with ether, during the last 24 hours. [What will Broussais and his disciples say to this treatment of intense GASTRO-ENTERITE? It will bring forth volumes of criticisms in France!] Ten grains of calomel and four grains of carbonate of ammonia every four hours. 16th. Had some sleep this morning—singultus and sickness not quite so harassing—yellow colour of skin very deep—face much flushed—bowels relaxed, the motions being black—tongue and mouth covered with black sordes. "*Wine, brandy, ammonia, calomel, and æther continued*." 17th. "Burning sensation in the stomach and œsophagus has disappeared." Pulse 110—singultus still troublesome—alvine discharges of a lighter colour, containing "floating black flaky substances." Same medicines continued. 18th. Mouth sore—gums swelled—pulse 100, regular and full—bowels open—evacuations of a dirty brown colour. Same medicines. 19th. Pulse 96, full and rather hard—skin soft—yellow suffusion still deep—some good fecal matters in the stools—singultus less—coma increased—takes soup and sago in pretty large quantities. Brandy and part of the wine discontinued—calomel, ammonia, and æther continued. 20th. Same as yesterday. A bottle of

wine in 36 hours—medicines continued. 21st. Yellow colour less intense—gums, cheeks, and tongue ulcerated—bowels open—stools of a dark green colour. Same treatment. Ptyalism did not begin to flow till the 27th—when we find the skin cool and soft—the evacuations of a dark bilious hue—mercurial odour on the breath strong. By the 31st the tonic treatment was commenced, and the patient slowly recovered.*

Remarks. The above case is a very interesting one. It was decidedly an example of "YELLOW FEVER"—at least it had every attribute of that terrible malady—and so far it is capable of exciting some important pathological considerations. In a therapeutical point of view, it will probably occasion some difference of opinion. In politics, a measure is treasonable or loyal, just as it happens to be successful or the reverse. So, in medicine, we suppose we must consider that mode of treatment the best, which ends in recovery. Knowing the talents and experience of Mr. Niell and Dr. Dickson, who had the charge of the case, we should be extremely loth to differ from them in therapeutics; but, judging from the record before us, we shall not offend by saying that we should have pushed local depletion farther, and been less liberal of mercury and wine. That the gastro-hepatic system bore the great onus of disease, cannot be doubted, and that all the aggravated symptoms were produced by the remedies employed, will be confidently averred by our Continental brethren. In this sentiment we do not join; but still we think that the majority of practitioners will agree with us in the opinion which we have broached, as to the non-necessity for such powerful stimulants and mercurials as were employed—and as to the propriety of applying numerous leeches to the region of the liver and stomach. It is much more easy, however, to criticise a case when it has terminated, than to treat it at the bed-side; and therefore we are perfectly ready to grant that the talented practitioners in attendance (both of whom we are proud to call our friends) acted in all respects with wisdom and skill, according to the symptoms that presented themselves from day to day.

* Med. and Phys. Journal, Aug. 1828.

60. HORE LACONICÆ.

No. 3.

DYSMÆNORRHŒA.

The sooner that the laws of *vitality*, in physiology, are abolished, and the laws of *mechanics* or *physics* established in their stead, the better for THERAPEUTICS! Dr. MACINTOSH has lent a powerful hand to this good work, and deprived the College of Physicians of one more of their *monopolized* articles—DYSMÆNORRHŒA. This is no longer to be considered within the domain of physic—but of surgery. There will be no more EMMENAGOGUES prescribed. The BOUGIE is to supersede aloes and myrrh! “It *always* occurred to me,” says Dr. M. “that there was some *mechanical* cause which produced dysmænorrhœa.” It is refreshing to see a man of genius *come* to an investigation with a hearty *predetermination*. These are the men who are sure to overcome difficulties—and as there is a whole tribe of troublesome diseases characterised by *dys*, or difficulty, it is most fortunate that Dr. M. has undertaken the management of one of the most intractable of them all. We see stricture of the urethra produce dysuria—and a bougie cure the *dys*:—Why, then, should not stricture of the *os uteri* produce dysmænorrhœa; and why not cure it by the bougie? The idea is so natural, the conclusion so obvious, that it is wonderful it should not have been entertained long ago. Yet so it was, that even Dr. Macintosh did not hit on the precise mechanical cause till the year 1823, when a gentleman presented him “an uterus *without an orifice*.” A new light now beamed on this dark subject. If the want of an orifice prevented the menses from flowing at all, why should not a small orifice produce difficult menstruation? “Mechanical dilatation appeared to be the remedy;” but Dr. M. hesitated to propose it to modest women. At length, a young woman came from the country, who, up to the age of 16 years, had been healthy; but from that till the age of 22, fell off in health. She had never menstruated, but had pains and sense of weight in the loins monthly. On examination, no orificium uteri could be felt. A very small silver probe was attempted to be introduced, but without

success. The sharp triangular extremity of the same instrument was next made to perforate into the cavity of the uterus, and the button point afterwards passed up to the fundus. A good deal of irritation succeeded, and the operation could not be repeated till the eighth day, from which time it was persevered with till a male bougie, No. 6, was got in. This was followed by much local and constitutional derangement, and, in two days after this tumult in the system the patient menstruated.

This was a case of complete *occlusion*, and how far it bears on the subject of dysmænorrhœa, we leave to our obstetrical brethren to determine. Dr. M. informs us that he has employed the bougie in six or seven cases, not detailed, with uniform success—and we are bound to believe him. But we are not bound to adopt either his principles or his practice. We firmly believe that the *former* are as erroneous, as the *latter* would be dangerous, if generally pursued. Let those who have seen most of female diseases reflect on the numerous moral and physical causes which disturb menstruation, and render it either painful or null—let them, then, ask themselves what proportion of dysmænorrhœas are attributable to mechanical stricture of the *os uteri*—and what to other causes. Probably there may be as many as there are cases of dyspnœa, dependent on the stricture of the rima glottidis.

SUCCESSFUL EXCISION OF THE CERVIX AND OS UTERI. By Dr. WEATHERILL, of Liverpool.

Of all the cases which LACON has ever read, that of Dr. W.'s is the most remarkable—for ignorance of language, confusion of thought, and defiance of all credibility. “*Ex ore tuo te judico*” A female, aged 37, applied to the Doctor, (one of Dr. Harrison's class, we presume,) for the cure of leucorrhœa, excoriation, and “symptoms of disease about her loins and lower abdomen,” attended with “feelings of bearing down about the upper and inner part of the thighs.” The discharge was exceedingly troublesome

—"being sometimes watery and *excoriated*."* On examination, the Doctor found a world of mischief—enlarged and indurated os uteri—evidence of excavations—ulceration—jagged and irregular edges, &c. &c. On the 12th of May last, this unfortunate patient was placed on a table, and secured as for lithotomy. The steps of the operation shall be given in the Doctor's own words—and we venture to assert that such a description is without a parallel in the annals of surgery.

"Two dilators, made with short handles, and blades set at right-angles, about six inches in length, with edges and ends rounded and quite blunt. These were introduced, and held by assistants, to obtain lateral dilatation of the vagina. With a tenaculum, strong and of large dimensions, I transfixed the cervix and made extension. The uterus, however, was not to be drawn down so easily, and every attempt to do so sufficiently to proceed with the knife, *in situ*,† entirely failed, and caused extreme agony to the patient; and it was not until I had fixed the tenaculum through that part of the vagina which attaches itself round the cervix, and laid hold of the body of the uterus, using at the same time forcible extension, that I was enabled to see the seat of disease. The os uteri, internally, was nearly destroyed by ulceration; the cervix contained several small ulcerated openings, as if eaten by worms, with inflamed margins, and the body of the uterus I believed to be more or less affected. Guided by these appearances, I hesitated not to extend my incisions beyond the grasp of the tenaculum, which of course brought me into the cavity of the abdomen. Before the operation was more than half completed the hold of the tenaculum gave way, and the intestines protruded; which,

added to the shrieks of the patient, rendered my situation rather perplexing. I made several fruitless attempts to secure and draw down the uterus again with the tenaculum, and was compelled, after some delay, this instrument being of no other use than merely to keep the uterus steady, to finish the operation in the vagina. After the vagina was partially filled by a plug of linen, the woman was put to bed; and, although she had not lost more than 3viij. of blood during the operation, she appeared much exhausted. I ordered a table spoonful of port wine, to be given frequently, and 20 or 30 drops of laudanum, if in great pain. I think it needless to enumerate her situation and treatment from day to day; it is sufficient to say, that she recovered without the intervention of one bad symptom, and took no other medicine than a few doses of a common cathartic mixture."

We are inclined to be charitable on this occasion, and to believe, either that the Doctor has hoaxed the Editor, or that the whole was a dream—an "unsubstantial pageant"—very well calculated to make the "vulgar stare." If there exists such a personage as Dr. Weatherill, we are quite confident that he *would have hesitated* (though he says he did *not* hesitate) to "extend his incisions beyond the grasp of the tenaculum," so as to lay open the cavity of the abdomen, and let the intestines come into open day! How he contrived to finish the operation he gives us no information—probably because he awoke from his dream in the midst of the chaotic imagery already delineated! After such a painful recital, it is gratifying to find that the patient has—"ventured across the Atlantic," and pitched her tent—

"Where ANDES, giant of the Western Star,
With meteor standard to the winds unfurl'd
Looks from his throne of clouds o'er half the world."

We will venture to assert that, of all the *wonderful* things which Mr. GIANT ANDES must have seen, during his long spectatorship, this case of Dr. Weatherill's is the most wonderful. We question whether even BROTHER JONATHAN will believe it.

DR. BLUNDELL'S EXTIRPATION OF THE UTERUS.

A still more formidable operation than

* It was reserved for the nineteenth century to see medical journals conducted by men who had no knowledge of *practical* medicine! Will it be believed, in future ages, that a *physician* could write, or an editor (in the simplicity of ignorance) print, such palpable absurdity as an "*excoriated* discharge"—a fluid with its skin off!!

† "*In situ*"! Where is LAWYER KEENE, who corrects the bad English and worse Latin.

the above, and, we dare to say, an operation more cautiously and scientifically performed, remains to be put on record.

The patient was a married woman, aged 60 years, and had borne children. She had laboured for some time, under offensive and extremely profuse sanguineous discharges from the womb, which, on examination, was found to be in a state of ulcerated carcinoma. The organ was moveable—the side of a goose's egg—its mouth broad, open, and of cartilaginous hardness—with an ulcer on the surface of the diseased mass, the size of a shilling. There did not appear to be any visceral disease, and, although the woman was greatly debilitated, from the loss of blood and other effects of this terrible disease, she was deemed a subject for an operation which may fairly be deemed the *most formidable* to which the human frame has submitted, or modern surgery dared to achieve. The steps of the operation are minutely described by Dr. Blundell; but they cannot—they ought not to be abbreviated.

“The bowels having been cleared, and the patient being resolved to submit to the operation, on the 19th of February, 1828, I determined to remove the diseased parts without further delay. For this purpose, having placed the woman in the obstetric position usual in this country (on the left side I mean,) close upon the edge of the bed, with the loins posteriorly, the shoulders advanced, the knees and bosom mutually approximated, and the abdomen directed a little downwards towards the bed, I began the operation.

“*First Stage of the Operation.*—I commenced by passing the index and second finger of the left hand to the line of union between the indurated and healthy portions of the vagina; the finger being converted into a cutting instrument (varying with the exigencies of the operation,) by means of a moveable knife, which requires a word or two of description. The blade of this knife, not unlike that of a dissecting scalpel, was mounted upon a long slender shank, which, including its large handle, was about eleven inches in length; and with this stem the blade was united, so that its flat, or plane, formed with the stem an angle of 15 or 20 degrees. The first and second fingers of the left hand then being in the back

of the vagina, contiguous to the diseased mass (as before observed,) by taking the stem-knife in my right hand, I could at pleasure lay the flat of the blade upon the front of these fingers, and urge the point of the instrument a little beyond the tip, the apex of the fore finger being in this manner converted into a cutting point, by little and little I gradually worked my way through the back of the vagina, toward the front of the rectum, so as to enter the recto-vaginal portion of the peritoneal cavity, frequently withdrawing the stem-scalpel, so as to place the point within the tip of the finger, and then making examination with great nicety, in order to ascertain whether the vagina was completely perforated, minute care being necessary in this part of the operation to avoid wounding the front of the intestine.

Second Stage of the Operation.—A small aperture having been formed in this manner, in the back of the vagina, through this opening the first joint of the fore-finger was passed, so as to enlarge it a little by dilatation and slight laceration (safer than incision.) This done, and a cutting edge being communicated to the finger, by placing the plane of the blade in such a manner that its incisory edge lay slightly advanced beyond the side of the finger now lying in the aperture, after drawing the point of the instrument within the tip of the finger, which operated as a guard, I proceeded to make an incision through the vagina transversely, that is, in a direction from hip to hip: for this purpose carrying the finger with its cutting edge, from the opening in the vagina already made, to the root of the broad ligament on the left side, so as to make one large aperture. I then took a second stem-scalpel, formed on the same model as the preceding, with this difference, that the incisory edge lay on the other side of the blade; and laying this instrument on the fore-finger as before—in such a manner, however, that the cutting edge lay forth on the other side of the finger (to the right of the pelvis, I mean,) I carried the finger thus armed from the middle of the vagina, where the former incision commenced, to the root of the broad ligament on the right side; so that, at the end of this, which was the second step of the operation, the diseased and healthy

portions of the vagina behind became completely detached from each other, by a transverse incision, which stretched across the vagina, between the roots of the broad ligaments immediately below the diseased parts. At this time the intestines could be felt hanging about the tips of the fingers; but the blade of the scalpel lying on the finger, in which it was as it were embedded, the risk of a wound, whether by point or edge, was completely prevented.

“Third Stage of the Operation.—The back of the vagina, then, having been divided in this manner, I urged the whole of the left hand, not of large size, into the vaginal cavity—and the more easily because the woman had borne children; afterwards passing the first and second fingers through the transverse opening along the back of the uterus—this viscus lying, as usual, near the brim of the pelvis, with its mouth backward, its fundus forward, and a little elevated just above the symphysis pubis. This manœuvre premised, under full protection of these fingers, now lying between the womb and the intestine, taking a double hook, mounted on a stem eleven inches long, I passed it into the abdominal cavity, through the transverse aperture, along the surface of the fingers already mentioned; and laying it in front of them, near their tips, I converted these fingers into a sort of sentient tenaculum, which, with little pain to the patient, I pushed into the back of the womb, near the fundus, and then drawing the womb downward and backward, towards the point of the os coccygis, as I carried the fingers upward and forward, I succeeded ultimately in placing the tips over the fundus in the manner of a blunt hook; after which, by a movement of retroversion, the womb was very speedily brought downwards and backwards, into the palm of the left hand, then lodging in the vagina, where, at this part of the operation, the diseased mass might be seen distinctly enough, lying just within the genital fissure.

“Fourth Stage of the Operation.—The process of removal being brought to this point, the diseased structure still in the palm of my hand, remained in connexion with the sides of the pelvis, by means of the fallopian tubes and broad ligaments,

and with the bladder by means of the peritoneum, the front of the vagina, and interposed cellular web,—parts which were easily divided, so as to liberate the mass to be removed. The broad ligaments were cut through, close upon the sides of the uterus, and in dividing the vagina great care was taken to keep clear of the neck of the bladder and the ureters. This division of these attachments, and the removal of the diseased mass, constituted the fourth step of the operation. Some bits of indurated vagina, altogether not larger than the common bean, were left in the pelvis, to be removed at some future period, should symptoms require. This fact is worth recording.

“To this circumstantial account of the operation may be added a few remarks. The intestines did not protrude. About an ounce of blood was lost when the back of the vagina was divided, three or four more ounces following when the vagina was cut in front. Ligatures, tenacula, and forceps, were in readiness to secure the vessels, but these were not required.

“The intestines were felt at one time only, namely, when two fingers were lying out through the opening in the vagina behind. Of course some pain was felt when the first incisions were making, and when, as in ordinary obstetric operations, the hand was urged into the vagina; but the principal distress was occasioned by drawing down the uterus, when the retroversion was accomplished, and the ligaments were put upon the stretch.

“The pains and complaints scarcely exceeded those observed in instrumental deliveries. The patient lay in the ordinary obstetric position, and required no restraint. The insertion of the hook into the back of the uterus did not occasion much suffering. The operation, from first to last, occupied about an hour, but much of this time was spent in reposing and considering what might best be done. With better instruments, and greater activity, the whole operation might most probably be completed in five minutes. In obstetrics, however, celerity is considered to be in itself a secondary merit, and the operation was conducted on obstetric principles. The general range of

the pulse was between 120 and 130, a frequency common in delivery by instruments.

"When the last gush of blood was observed, the pulse became imperceptible in the wrist, returning however in the course of ten or fifteen minutes. A few ounces of spirits were administered to the patient as the operation proceeded. Throughout the process the fore-finger of the left hand was the principal instrument, and the scalpels and hooks were employed merely as the means of arming the finger for its various operations. The professional friends who favoured me with their presence were Dr. Elliotson, Mr. Callaway, Mr. B. Cooper, Mr. Key, and Mr. Morgan. An accident deprived me of the presence and assistance of my friend Dr. Roots."

Five months have now elapsed since the operation and "the patient is fat and well." We have no hesitation in characterizing the foregoing operation as one of the boldest that has ever been performed on British soil.

ADMISSION OF AIR INTO A VEIN.

It is well known that Dupuytren lost a female patient, while on the operating table, in consequence of air rushing into a wound of the external jugular vein. Some people have been sceptical as to this fact, which strongly corroborates Dr. Barry's doctrines. M. Bouley, a Parisian veterinarian, while bleeding a horse in the jugular vein, suspended, for a few seconds, the pressure below the orifice, and instantly heard a rushing noise, which he had often before heard, in the course of his practice, and therefore did not attend to it. The bleeding over, the horse was led to the stable, when the animal became quickly affected with general tremor, laborious breathing, small, irregular pulse—and, finally, fell down as if stricken with lightning. M. Bouley now conceived that the noise he had heard, was the transit of air along the vein. He instantly opened another vein, and, as the blood flowed, the animal revived. The two cases now on record should put surgeons on their guard when bleeding from the jugular vein. The orifice ought to be carefully closed before the pressure is taken off the inferior portion of the vessel.

COMPLETE SCHOOL OF MEDICINE AT CAMBRIDGE.

The medical world will be rejoiced to learn, that Oxford and Cambridge—especially the latter, have been lately raised, by a sort of incantation, into regular and pre-eminent schools of medicine, where the sublime doctrines of Plato and conic sections are mingled with the lighter studies of pathology and clinical practice! The curricula have been promulgated in due form—and already has a disciple of the new school passed the dread ordeal of examination, compared with which the Parisian *TENTAMEN* is a mere song!* Only think that a *Cam bachelor* should be forced to commit to memory the devious paths of the *par vagum*—the three great branches of the celiac artery—the use of the pericardium—and the meaning of the small omentum!† So much for anatomy. In respect to physiology, it is to be presumed, from the following question, that the name of one Charles Bell has actually been heard on the waters of the Cam and the Isis. "What is the difference of function attributed to the fifth and seventh pair?" It is clear from this that the notion of the *seventh* pair being the nerves of audition, is quite exploded at Cambridge. As to the *portio dura*, it would be too *hard* a task for the bachelor to explore its functions.

In the second examination on pathology and therapeutics, we were delighted to observe how admirably the examiners direct the minds of their candidates into the best and most useful channels of pathological and therapeutical investigation. Was there ever such a sapient question asked, in any age or country, as the following?

"What remedy does Sydenham recommend in the diarrhoea supervening on gout?"

O thou naughty Haviland! Let us ask thee one question, and answer it without retreating to thy library. What is the first letter of the second column of the

* See Medical and Physical Journal for August 1828, p. 178, where the ordeal is detailed.

† "What is meant by the small omentum?"—*Id.*

third page of the Morning Chronicle, published on Saturday, the 9th of August, 1818? Answer us that, and we shall laud thy memory, whatever we may think of thy discretion.

OXFORD *versus* CAMBRIDGE.

We had scarcely finished the above reflections, when we took up the 36th No. of the Medical Gazette, and perused, with some interest, the leading article, on "the FELLOWSHIP OF THE COLLEGE." We will not venture to say, though certainly we *suspect*, the source of the article. It embraces a subject that divides itself into four parts—the existence of a great evil in the College—the consequences of this evil—the causes thereof—and the remedy.

1mo. The *EXISTENCE* of the evil is thus admitted:—"The College of Physicians has certainly not acquired strength by the numerical increase of its fellows; yet it ought to have done so. Out of a hundred men who, by this discipline, (Oxford and Cambridge study) would have enjoyed uncommon advantages of previous education, more eminent physicians must have grown up than are to be found amongst the Fellows of the College."

2do. So much for the *existence* of the evil—it is with fear and trembling we venture to contemplate the *consequences* of it. One of the consequences is so pressing, and so near at hand, that we place it first on the list. "Some plan must be quickly thought of, or the heavy *weight* which is adding itself, year after year, to the *tail* of the FELLOWSHIP, will *pull the College to the ground, and keep it there.*" Mercy on us! We had heard that a man, a ship, or an edifice, might be *top-heavy*, and thus rendered liable to tumble down; we also know that there is a certain animal called a sheep (we mean no invidious comparisons) at the Cape, whose *tail* becomes of a very inconvenient size and weight;—but we really never dreamt that the *tails* of the FELLOWS grew annually at such a rate as our cotemporary has stated—much less did we imagine that, if their number were doubled, they would ever be able, with such instruments, to "pull to the ground," such a massive structure as that in Pall Mall East! This, however, is not the

worst of the consequences. It is positively asserted by our cotemporary, that this increasing weight of tail in the fellowship "*will ruin the respectability of the profession.*" The writer does not suppose, of course, that the practitioners of surgery, pharmacy, or midwifery, constitute any part of the "PROFESSION"—or that they can have any thing to do with its respectability or advancement. All depends on the Fellowship—and, strange to say, on their tails rather than on their heads!

3tio. *Causes of the Evil.* It is wonderful to observe with what rapidity error is fading away before the light of truth. The reason why the Fellows of the College have distinguished themselves more in general literature and science than in strictly medical pursuits, was generally considered to be their long residence at Oxford and Cambridge. This is now found to be an erroneous notion. The cause of their not shining in medicine is the shortness of their stay in the English universities!!

"There are constantly to be found in Cambridge a number of men who would never have thought of going thither, but for the sake of seeking a way into the College of Physicians." "Nine half-terms at Cambridge complete the residence required for a medical degree." "Among these medical term-trotters at Cambridge are to be found tradesmen, and refugees from other professions, and physicians who have formerly graduated elsewhere." Such being the case, the following inference is undeniable.

"The rank of Physic, as an *honorary* profession, in this country, is greatly upheld by its having constantly among its members those who have been educated in the same manner, and in the same habits, with the *best style* of English gentlemen."

This *best style* is only at Oxford, where no half-terms—or, what is the same thing, *half-gentlemen*, are allowed—and, consequently, where shining characters *only* can be formed. Now, then, the secret comes out. It is from Cambridge that the *heavy-tailed* Fellows come—the term-trotters—tradesmen's sons—refugees—and foreign graduates!

"This number is increasing every year, and if the University do not reform their system, or the College of Physicians

theirs, this facility of obtaining the most honorable degree in medicine will ruin the respectability of the profession."

We do not agree with the writer, (who is manifestly of the high aristocratical party) that this facility of obtaining medical degrees at Cambridge will ruin the respectability of the profession, because we conceive that the Fellows of the College form but a very diminutive proportion of that profession. But we believe, and we long ago stated our belief, that the invidious distinction between Fellows and Licentiates would, in twenty years, completely cure itself. The degradation of the Licentiate will drive the rising generation of English Physicians through the prescribed channel, and the numbers which must flock into the Fellowship, whether they have heavy or light tails, will effectually destroy the monopoly. So far from regretting this consummation, we "rejoice and are exceeding glad" at the prospect. It is one of those instances of retributive justice which every now and then refresh the eye of the philosopher, as an Oasis in the desert does that of the traveller.

4to. THE REMEDY. The evil which our contemporary so much deplores is, in our eyes, no evil at all; but the natural corrector of an antecedent evil. Let us hear, however, the remedy which he proposes.

"Now the whole profession are interested in the remedy of this evil, for the whole profession are concerned in the character of the body which presides over it. But what shall be the remedy? Probably, the universities would not bear patiently the interference of the College in their discipline, or even allow it to suggest to them the condition of granting medical degrees. But the College might do this—it might cease to examine the bearers of English degrees for admission into the Fellowship, as a matter of course; it might examine them simply for a license, and elect them subsequently according to their character, with or without a second examination, into the Fellowship." 309.

Much as we object to the mode in which the Fellowship is now obtained, we object still more strongly to the one proposed above. By this new plan the College would be emancipated from all laws, even of its own construction—except one—*sic*

volò, sic jureo! The election to the Fellowship would depend on caprice, favour, intrigue,—and that body would thus be erected into one of the most despotic tyrannies that ever existed on the face of the earth! To the "tradesmen's sons"—the "term-trotters" of Cambridge—the graduates of other universities—to all but "the best style of English gentlemen," the College would be hermetically sealed! Fortunately, such a monstrous proposal of sacrificing talent, science, and learning, at the shrine of aristocratic wealth, would be scouted in the present day—for the time *has* come, when respectability in medicine is the result of moral worth and professional talent;—not to be put on with a black-silk gown, after a certain period of residence on the banks of the Isis.

The article which has given rise to these observations, and which evidently emanates from the *high aristocracy* of the College is not one of the least significant "SIGNS OF THE TIMES." There is a tolerably old maxim that—"a house divided against itself cannot stand." That the aristocratic OXONIANS, (the ABSOLUTISTS) eye with jealousy the semi-plebian CANTABS, (or LIBERALS) is now beyond a doubt. It remains to be proved whether the *heavy heads* of the former, or the *heavy tails* of the latter shall prevail. If an unbiassed and independent spectator may be allowed to form an opinion, we would say that the *tails* will gain the day—for if there is to be a dead weight about a body of men, let it, in God's name, be located near the bottom rather than the top of that body.

We have only to reiterate a piece of advice which we, some years ago, gave to those parents who were educating their sons as physicians in this country. By the regulations of Cambridge, nine half-terms, of six weeks each, and spread over three years, qualify for a degree, and secure the admission, in due time, to the Fellowship. Edinburgh requires four years. Now we fearlessly maintain, that these four years, spent in London, and keeping terms at Cambridge, will insure a better medical education than Edinburgh or Oxford can afford—will not be more expensive than the former—and will save the Edinburgh graduate from the mark of de-

graduation which, as a licentiate, he must undergo, if he settles in the metropolis, or within seven miles thereof. This information should be pondered on by parents!

SMOKING TOBACCO IN HERNIA.

In a recent journal of this metropolis, there is a serio-ludicrous proposal from Mr. Wallace, of the Royal Navy, respecting the superiority of smoking tobacco over the same drug used as an enema.

It is probable that Mr. Wallace has not accurately observed the effects of tobacco given per anum. The death-like coldness and pallor, the feeble pulse, the relaxation of the muscles, and the tendency to syncope, are independent of sickness or vomiting, and precede that operation. These phenomena are totally different from that nausea which is produced by smoking tobacco for the first time. We can assure Mr. Wallace that his plan would be entirely fruitless, and would, in no efficient degree, contribute to the reduction of a hernial protrusion.

HOSPITAL PRACTICE.

61. ROYAL INFIRMARY OF GLASGOW.

A quarterly report of the cases in the surgical wards of the above institution, is published by Dr. Anderson, in the third Number of the Glasgow Journal. Before he proceeds to particular cases, the Doctor has given a table of maladies admitted, and operations performed, shewing in the gross, the surgical practice of the hospital.

I. ARTIFICIAL ANUS TREATED BY COMPRESSION AND THE CAUTERY.

Baron Dupuytren's memoir, of which we have given so ample an account, will make, if we mistake not, an important improvement in the cases of artificial anus occurring in consequence of hernia or wounds. The subject of the present case was a Mary Stewart, admitted on the 10th November, with a very large sore in the left groin, extending from the spine of the ilium to the symphysis pubis. It was three inches broad, passed above Poupart's ligament, was ragged, irregular and sloughy, and a sinus extended from it down by the side of the labium, from which could be pressed a good deal of purulent matter. The gut protruded as a round firm substance in the centre of the sore, and immediately above the protrusion was seated the opening, through which all the fæces were evacuated. The poor girl was hectic and greatly emaciated, and the pulse was so frequent and feeble as not to admit of being counted.

For twelve months she had been subject to femoral hernia, which, a month before admission, had apparently got strangulated, and sloughed in eight days, from which time the fæces had passed by the wound.

"This case was very unpromising, and from the excessive debility, it seemed almost hopeless. A nourishing diet, with a liberal allowance of wine and brandy, produced little improvement. The appearance of the discharges soon showed that her debility chiefly arose from inanition, owing to the artificial opening having taken place in a part of the gut where the process of assimilation was still incomplete. With the double purpose, therefore, of affording nourishment, and dilating the lower intestines, I directed the use of large beef-tea enemata three times a-day.

"The next object was to prevent the escape of the contents of the gut, which not only kept up the debility, but produced sloughing of the sore, and hindered it from healing. The aperture admitted the finger, by which it was ascertained that only one side of the gut had been destroyed, and that the other side formed a continuous surface towards the abdomen. This case, therefore, did not require the application of the ingenious instrument of Baron Dupuytren. Plugging the opening with various conical shaped sponges was first tried; but she could not bear the degree of pressure necessary to retain them *in situ*. Recourse was therefore had to a long cylindrical tent of lint firmly rolled

up. This was pushed deeply into the gut, so as completely to fill the external aperture, and in this way nearly to maintain itself in position. Over this graduated compresses were placed and the whole supported by a light truss. She could not wear any kind of truss, however, more than a few hours at a time, and firm bandaging was substituted for it." 314.

The next day flatus was discharged from the rectum, and natural evacuations succeeded, and continued throughout the remainder of the treatment. Chloride of lime and lunar caustic were applied, and the sore, at the end of December, had contracted to the size of a shilling. The objection to the tent was its resting in the gut, obstructing the flow of the fæces in the tube, and hindering the cicatrization of the sore by forcing a portion of the contents of the intestine outward by the wound. An instrument was accordingly invented, that should not be attended by the same inconvenience, but it failed and was finally abandoned.

On the 16th of January, the opening was touched with the actual cautery, which checked all discharge for several days, and produced a decided contraction, after the separation of the slough. The cautery was frequently repeated, and under its employment the fistulous opening diminished to a very small point: the discharge was but trifling and occasional only: the health was revived; and, expressing a wish to go home, she left the infirmary at the latter end of April. The fistula was trifling, but the smaller it is the greater in general the difficulty of closing it completely, though productive of little inconvenience. With respect to the cautery, Dr. Anderson remarks, that he has found it very serviceable in many cases.

"I have cured several fistulæ of the urethra in this way, which had resisted every other means; and I lately saw a patient, from whom I removed a very large fungus of the antrum five years ago. Her disease has not returned, solely, I am convinced, owing to the free application of the hot iron. In hæmorrhagic oozings from sores or wounds, by which debilitated patients are frequently cut off, the eschar formed in this way is very effectual; and in obstinate bleeding from leech-bites, especially in restless children, where pressure is difficult, the point of a red hot

wire will at once check the discharge." 315.

That the pain and inconvenience of the actual cautery have been greatly exaggerated, we have very little doubt, but the prejudices against it even on the part of the patient, are often insuperable, generally strong. In Dupuytren's cases, that celebrated surgeon pared the callous edges of the wound, and brought the raw surfaces together by means of compression and straps. We wonder the above was not adopted in the present case, as Dr. A. would appear to have been aware of the practice of the Frenchman.

II. DISLOCATIONS OF THE CLAVICLE.

Every body knows the difficulty frequently experienced in managing dislocations and fractures of the clavicle. Sir Astley Cooper observes, that "it very rarely happens that these accidents to the clavicle are perfectly recovered from, some degree of deformity usually remaining. Of this the patient should always be informed at the commencement of the treatment, as otherwise he may attribute it to the negligence or ignorance of the surgeon."

Dr. Anderson conceives that the tendency to displacement after reduction, which is infinitely greater in some cases than in others, depends on the greater or less degree of injury done to the ligaments, particularly those between the coracoid process of the scapula and clavicle. The bandage of Brasdor, represented in the *Mémoires de l'Académie de Chirurgie*, and similar in principle to that of Sir A. Cooper, is probably the best for the purpose. Dr. Anderson, however, has found that confinement on the back for a fortnight, with a pad in the axilla, and the elbow advanced and bound to the thorax is preferable to any kind of bandage. "A narrow firm pillow placed between the scapula, will likewise conduce to throw back the shoulders, without exciting any opposing action in the anterior muscles." The difficulty is in so trifling an accident to prevail on a patient to submit to the confinement to bed.

One of the cases of luxation of the humerus into the axilla, was accompanied with a curious fracture of the bone. The dislocation was reduced, but the man died

next day, from the effects of other injuries. On examining the joint, it was discovered that the portion of the greater tubercle of the humerus, to which the tendon of the supra-spinatus is attached, was fractured and detached. Part of it being within and part on the outside of the capsular ligament, it would have been a matter of interest, of course, to have seen whether union would have taken place. Dr. Anderson believes that it would, and we think it exceedingly probable.

III. FATAL CASE OF SUPPURATION BENEATH THE FASCIA OF THE FORE-ARM.

Mary Drysdale, æt. 35, was lifting a heavy weight when she sprained her left wrist; and on the 1st of March, eight days after the occurrence of the accident, she was admitted into the Royal Infirmary. The two lower thirds of the arm, especially in front, were much swollen; the hand also swollen, and the back of it œdematous; the skin of a bright red colour, glossy, and tense; the pain so severe as to hinder her getting any sleep; the pulse 110; bowels costive; tongue furred, with head-ach and anxiety of countenance.

A purgative was given, and an incision immediately made on the front of the fore-arm. Another incision was made in the direction of the ulna on the 2d, and, on the 3d, the arm was easier, and the tension diminished. She had not, however, obtained much relief on the whole, and there being much heat and pain about the elbow, 12 leeches were applied, and a saturnine lotion. On the 4th, the whole arm was less inflamed, but the tension and pain had increased in the back of the hand. Suppuration took place in the palm, and incisions were made on the 6th, about the thumb and little finger, and a bandage was afterwards applied. The relief was so trifling, that Dr. Anderson was lead to suspect the existence of matter beneath the aponeurosis of the deep flexor muscles. On examination, obscure fluctuation was detected, and an incision carried deeply midway between the elbow and wrist, which gave issue to a mixture of purulent matter and sloughs. In this incision, an artery of magnitude was divided, and bled profusely beneath the fascia, which was instantly distended.

The vascular condition of the parts, the depth of the vessel, and debilitated state of the patient, deterred Dr. A. from extending the incision, and securing the vessel at the wound. Accordingly, the humeral artery was tied above the elbow, whilst the wound in the fore-arm was afterwards enlarged for the free discharge of the coagula and pus.

The suppuration now became profuse; the ring and little finger, having sphacelated, were obliged to be removed; the thumb became livid, but gradually recovered, and the patient expired on the night of the 14th March.

The ligature had separated from the humeral artery, which was closed, and the wound nearly healed. The vessel which was wounded could not be discovered, but Dr. Anderson thinks it was probably the interosseous. The muscles and soft parts had put on a healthy appearance, and the patient seemed to sink from the exhaustion produced by the discharge.

This case, when conjoined with the one that occurred to Mr. Lawrence, should teach a little caution in the practice of incisions. We should try to evacuate matter without evacuating at the same time a pint or two of blood.

62. PENETRATING WOUNDS OF THE ABDOMEN, WITH ISSUE OF THE VISCERA.

[Hôpital de la Garde Royale.]

Case 1. A young soldier received, in a duel, a thrust from a sabre on the anterior part of the abdomen, a little above and to the right of the umbilicus. The abdominal parietes were divided, and a considerable mass of omentum protruded from the belly. The patient was removed to the hospital, and attempts having been made, without success, to reduce the protruding omentum, some linen, spread with simple dressing, was applied upon it, and every precaution put in force to prevent the occurrence of peritoneal inflammation. Bleedings from the arm—applications of leeches to the epigastrium—cupping and fomentations to the abdomen, and a rigorous diet, were the principal means, and effectually checked the inflammatory symptoms.

Eight days after the infliction of the

injury, the omentum was cut off. The surface, which was cut, furnished healthy granulations, which were touched now and then with the actual cautery—no pain nor sensation of dragging was experienced—the functions of digestion were as regular as ever, and at the end of five weeks the patient was very nearly well.

Case 2. A horse-soldier, whilst engaged in a duel, received the point of his adversary's weapon in the right groin, a little to the inside of the anterior superior spinous process of the ilium. The Fallopiian ligament was cut across, and a portion of the small intestine issued from the wound, which the surgeon of the corps contrived to reduce, by enlarging the opening through which it had passed. Some hæmorrhage occurred, but none of any consequence, and the patient was bled from the arm, leeches, cupped in the loins and hypochondrium, kept upon a very rigid diet, and every measure had recourse to, which was likely to ward off peritoneal inflammation.

This latter did not take place, but the edges of the wound became swollen and inflamed, and considerable suppuration was the consequence. A counter-opening was required along the margin of the rectus muscle, and a second on the 30th of April, rather higher than the former. The patient was doing well, and was expected to be speedily cured.—*Clinique.*

It has always been a matter of surprise among surgeons, that the abdominal viscera should escape as they do. In the cases recorded above, the wounds were of a nature very likely to injure the intestines, and yet they got off in both instances scot-free. A very interesting case is related in his lectures by Sir Astley Cooper, where, in spite of the infliction of several penetrating wounds of the abdomen, not a single bad symptom supervened. Sir Astley likewise mentions a case, that is strikingly illustrative of the manner in which the intestines glide away from the edge of the instrument.

Case 3. Sir Astley was called to a house in the Borough, and shewn into a room where he found a female in her shift, lying on the floor, weltering in her blood. Having raised her with difficulty, and placed her on the bed she had just quitted, four wounds were discovered in her throat, one of which was deep and extensive.

"These I closed by sutures; after which she was able to speak, and I then asked her what had induced her to commit the act? She made an incoherent reply, but repeated the word stomach two or three times, which induced me to raise her linen, when I was surprized to find her bowels exposed by a wound reaching nearly from the pubes to the ensiform cartilage of the sternum; for, after cutting her throat with a razor, she had ripped up her belly with it, and let out her bowels, but the intestines were still distended with air, and I had a difficulty in returning them into the abdomen. They had not received the smallest wound! Dr. Key now came into the room, and I proceeded to sew up this extensive opening, but she died in nine hours."

The mode of treatment which Sir Astley recommends is as follows:—

"In the treatment of these wounds it is best to make interrupted sutures; the needle should penetrate the skin and the muscles, but not the peritoneum. If the muscle be not included in the ligature, a hernia is sure afterwards to form; and, if the thread is introduced through the peritoneum, it adds much to the danger of peritoneal inflammation.

"Between the sutures, strips of plaister, or of lint dipped in blood, should be applied, and the patient should be freely bled from the arm. If the local inflammation be great, leeches should be employed; purgatives must be avoided, and food must not be given for several days."

We think Sir Astley might have dwelt with greater force upon local depletion. The abdomen should be covered with leeches, and we are sure that in cases we have witnessed, particularly of peritoneal inflammation after hernia, this measure has been greatly neglected, though a powerful adjuvant to general bleeding.

If the stomach or intestines are wounded, the danger, of course, is incalculably greater. Even, however, in cases like these, the recoveries are often astonishing, and calculated to show the restorative powers which Nature can exert at a push. The case of Mr. Scott, where the patient survived a severe wound of the stomach, as well as the one in Baron Dupuytren's Memoir, where a maniac cut away half a foot of small intestine, are very remarkable instances of this kind.

63. ON VISCERAL NEURALGIA. By M. JOLLY. (Part the Second.)

In this second paper M. Jolly pursues the investigation of a very difficult, but a very important subject. Our author quotes a passage from Bichat, which shows that that illustrious pathologist did not overlook this important class of human afflictions.

"There are," says Bichat, "colicks essentially nervous, and which are totally independent of any local affection of the serous, mucous, or muscular coats of the intestines. These colicks have their seat evidently in the nerves emanating from the semilunar ganglia, and spread along the whole arterial system of the abdomen. *"They are veritable neuralgiæ of the nervous system of the organic life,* although these neuralgiæ have nothing in common with tic douloureux, &c.

In this last expression Bichat seems to have forgotten that the visceral nerves do not feel in the same manner as the cerebro-spinal nerves, and this difference of sensibility is quite sufficient to account for the greater quantity of pain that attends tic douloureux when affecting the former class of nerves. The affection seems really to be of the same nature in both cases, and only modified by the characters of the two classes of nerves. But, as we shall give a greater extension to this subject, when reviewing that part of Dr. Macculloch's work that treats of NEURALGIA, we shall here confine ourselves to the cases brought forward by M. Jolly. The following passage, however, is deserving of consideration, en passant.

"In the neuralgiæ of the trisplanchnic, as in those of the cerebro-spinal nerves, the pain is not the only sensible phenomena. Generally there is an afflux of blood to the tract of the nerves affected, as well as to the adjacent tissues; and as these two phenomena constitute two of the essential characters of inflammation, they may help to account for that febrile re-action which takes place in so many of the intermittent neuralgiæ—and may go far to identify the neuralgiæ apyreticæ with the neuralgiæ febriles."

Every day's experience of the last two years in this country will tend to confirm the above observation. The cause, whatever it may be, or whatever we may call

it—marsh miasma, febrile miasma, dolo-rific miasma—produces in one individual a periodical head-ach—in another, an ague—in a third, a HEPATALGIA, too often mistaken for HEPATITIS—in a fourth, a GASTRALGIA, treated by leeches, bleeding, blisters, &c. as GASTRITIS. But more of this in another place.

Case 1. Febrile neuralgia affecting the trisplanchnic nerves under the tertian form, and cured by antiperiodics after an unsuccessful trial of the depletory means.

Madame D—, aged 30 years, of sanguineous temperament, experienced, after an accouchement, a series of symptoms, apparently of an inflammatory character, and affecting the stomach, liver, kidneys, and uterus. Each attack, in short, resembled gastritis, hepatitis, nephritis, hysteritis, &c. according to the organ invaded, and each attack gave way to the usual depletory and antiphlogistic measures. But the intervals of relief were short and imperfect—and a few days generally sufficed to bring the malady back in some new place. At length, after the patient was reduced to a state of great debility, it was observed that the disorder made its appearance regularly every third day, whatever was the organ selected for its seat. Having arrived at the lowest ebb of weakness, and when depletive measures could no longer be thought of, the patient continued to be harassed with most distressing pains in almost all the viscera supplied by the trisplanchnic nerves. These pains were unequivocally periodical, returning every other day at a fixed hour, generally about eleven o'clock in the forenoon, commencing with a chilliness, head-ach, and vertigo, then affecting successively the epigastrium, the right hypochondrium, and the right side of the hypogastrium. The pains were accompanied by violent vomiting, and by such painful distension of the abdomen, especially about the region of the liver, that she could scarcely bear the weight of the bed-clothes. This state lasted from twelve to fifteen hours, terminating in a gentle warm perspiration, and being succeeded by an interval of nearly perfect health. In these intervals, there was neither pain nor even tenderness on pressure, in any part of the abdomen—no feverishness—no red-

ness but a slight whiteness of the tongue. In consultation with Dr. Chabanneau, it was agreed that the disease was a periodical neuralgia of the ganglionic system, and she was directed to take sixteen grains of the sulphate of quinine, with some opium and ether in the next interval. There was no return of the paroxysms till the eleventh day, when the patient thought proper to take a cathartic medicine, which immediately produced a recurrence of the attack. The quinine again stopped them permanently.

Case 2. Quotidian Intermittent Neuralgia of the Uterus. By Dr. Duparque.

Madame R. C. aged 28 years, tall and robust, was safely delivered in the beginning of October, 1827. She did not nurse her child, and the catamenia were re-established in six weeks, continuing regular till the month of February, 1828, when they stopped, without any ostensible cause, but again returned, eight days after the expected period, accompanied by extraordinary pains chiefly affecting the right iliac region, shooting into the pelvis, and extending towards the opposite iliac region. These pains were accompanied by a bearing down, resembling that felt in labour. They were acute, lancinating, recurring every three or four minutes, and forcing the patient to cry out from their violence. They soon induced a degree of delirium and even convulsions. These attacks came on about mid-day, and lasted with more or less intensity till the evening, ceasing about midnight, and then permitting the exhausted patient to get sleep. In the mornings she appeared in good health, and free from pain; but at noon, the enemy regularly made his attack, as above-described. The catamenia continued to flow, and on the eighth day an accoucheur was called, under the idea that the patient was suffering from abortion. This idea, however, was given up, and it was decided that the disease was phlegmasia of the uterus. Venesection, leeches, repose, fomentations, lavements, diluents, and the usual remedies, were prescribed, but instead of relieving, they greatly aggravated the paroxysms. Dr. Duparque was called in on the 14th of March, the twenty-fifth day of the disease. The patient was now reduced to a complete state of emaciation—the ap-

petite being nearly natural, the tongue moist and clean, the skin a little hot, the pulse quick and irregular, the abdomen soft and insensible to pressure, but this pressure excited some pain in the iliac and hypogastric regions. Nothing particular could be detected in either of these regions by manual examination. The os uteri felt rather turgid, and more open than natural, but not more so than during the catamenial period. The uterus itself did not appear to be at all enlarged. Dr. Duparque considered the disease as a regular PERIODICAL HYSTERALGIA, and promised the desponding patient a speedy cure. Eight grains of the sulphate of quinine were ordered to be taken during the next remission. The paroxysms did not return at noon, but only a few mitigated pains in the evening. There were no more attacks, but the patient continued the quinine for some days, by way of precaution.

Case 3. This case was recorded in the Journal of Vandermonde, so long ago as the year 1779, and bears upon the present investigation.

A female, aged 35 years, of melancholic temperament, was seized, after some domestic troubles, with *hysterical paroxysms*, evinced by great commotion in the bowels, globus hystericus, and a sense of insupportable anxiety. These paroxysms returned in the evening, lasted through the night, preventing sleep, and disappeared in the morning. She had been three months in this state when the narrator was consulted. The attacks, at first, were separated by intervals of a few days; but latterly that had been almost daily. She was cured, and very promptly too, by the sulphate of zinc.

Case 4. This is a case of intermittent rheumatism which happened in the person of Mr. Rumsey, a surgeon, and is recorded in the Edinburgh Medical and Surgical Journal for July, 1818.

“Fever came on in the afternoon, with a violent pain of the abdomen, a great sense of distension, and actual enlargement, with great flatulence. My own sensation was, that nothing would give relief but evacuations. An enema was given with little or no good effect, yet, in the course of a few hours I fell asleep, and awoke in the morning almost well,

not expecting any renewal of disorder. But on the next evening I found myself suffering again precisely in the same manner. Obtained little or no relief from the injection, which I repeated, feeling as if nothing would relieve my pain but evacuations. Again I became well in the night, and was in the morning without fever or complaint. In the ensuing afternoon, at the usual hour, I was attacked, for the third time, with fever, my bowels were inflated, hard and full, and aching in the most distressing way. I began to suspect that the complaint was intermitting rheumatism, especially as I had many times had the most painful intermitting face-achs, which always gave way to bark. I had recourse to this remedy in substance, and, to my great satisfaction, escaped the paroxysm on the following day. My speedy recovery convinced me that the attack was intermitting rheumatism, and not inflammatory, as might, with reason have been suspected.

"I thought it a remarkable fact, not aware that rheumatism affected the muscles of the abdomen in this way, and still more remarkable, that, by their vicinity to the bowels, without any intelligible or direct communication, the viscera should be also affected, as the flatus and distension proved."

We admit that rheumatism is very frequently an intermittent disease; but we see no reason for concluding with Mr. Rumsey, that his was a case of that kind. Well might he wonder how rheumatism of the abdominal muscles should affect the abdomen with flatus and distention. The case is a very well marked one of the trisplanchnic neuralgia now under investigation. Mr. Rumsey states some particulars of another case, where a lady, after travelling in damp ground, became affected with an illness which, at first, was obscure, but afterwards assumed the type of a quotidian ague, "the paroxysms being accompanied by a distressing pain in the abdomen." This patient was quickly cured by bark. The following case shows clearly, we think, the connexion between neuralgia of the cerebro-spinal nerves, and that of the ganglionic nerves. It is also recorded by Mr. Rumsey.

Case 5. "Mrs. W—r, about 30 years

old, had a sore throat, with some considerable sloughs in it. After some days, without any remarkable occurrence, it got well, and, within a day or two, she was much troubled with face and tooth-ach. The pain was very acute, intermitting and returning once in the day, by a sudden accession. The use of the bark was begun, but producing a violent sickness and fainting, was discontinued. With warmth, and the use of wine, she soon lost the pain, and, except that she was weak, had for a few days no disease. Not many days had elapsed, however, before she complained of pain in the lumbar region, leading round the abdomen, and producing actual enlargement, as well as a distressing sense of fulness and flatus. It continued two or three hours, and then left her easy. The night and following day were free from pain, until 5 o'clock in the evening, at which hour it returned severely, affecting the intestines by distension, producing restlessness, irritability, and feverish quickness of pulse. I witnessed the same daily paroxysm, followed by its interval for five or six days, with the variation of observing a later hour, and being weaker in its attack."

The following case is recorded by M. Hutin.

Case 6. A female, aged 34 years, previously in good health, was awakened in the middle of the night with violent palpitation, accompanied by severe pain in the region of the heart, so that she was threatened with instant suffocation. In this distressing condition she remained till the morning, when all the symptoms suddenly vanished. At the same hour, in the succeeding night, the attack returned with equal violence—lasted till morning—and disappeared as before. The complaint now changed its form. The patient experienced, at irregular periods, violent pain in the stomach, accompanied by vomiting—or severe colicky pains in the bowels, region of the liver, or kidneys, which observed a periodical character. Repeated applications of leeches to the anus and warm baths were employed without success. Tonics and antispasmodics effected a cure.

That these visceral neuralgias assume the form of malignant intermittent fevers,

our author is convinced, and the following case related by Torti, among others, is quoted in support of this opinion.

Case 7. A female became affected with a simple ague, accompanied by pains in the abdomen, vomiting and purging. It was in the third paroxysm when Torti was called to her, and no information was given to him respecting the periodicity of the complaint. The local symptoms were alone complained of. He found the patient cold, without pulse, the face dead-ly pallid, the eyes sunk, the nose pointed, the temples hollow. Torti thought her in *auticulo mortis*; but re-action succeeded, and a remission followed. Next day the violent paroxysm of pain, sickness, and purging returned, and went through a certain period. Torti now perceived the nature of the complaint—prescribed the bark in large doses, and soon put an end to the paroxysms. We shall conclude our list of examples with the following case from M. BAILEY DE BLOIS.

Case 8. An Irish gentleman, aged 22 years, residing at Rome, was seized in the month of August, 1822, with a paroxysm of ague, accompanied by excruciating pain in the abdomen. When Dr. Baily arrived, he found the patient in a state of indescribable agitation. He was rolling about in his bed, pressing the abdomen with his hands, and uttering the most doleful lamentations. The tongue was rather white, without any redness at the point—no thirst—pulse full, strong, and developed. A pint of blood was taken from the arm, and 20 leeches were applied to the abdomen. In the evening, all the symptoms were dispersed, and the night was passed in tranquillity as was the following day. On the third day, however, he had a rigor in the morning, followed by fever, and the same excruciating pains in the abdomen which were described above. Twenty more leeches were applied to the abdomen, and a pound of blood abstracted from the arm. The paroxysm ceased in the evening—the night and succeeding day being free from complaint. On the fifth day, the symptoms returned with even increased violence, accompanied by great depression of spirits. The eyes of the physician now appear to have been opened. The paroxysm was

allowed to proceed, and as soon as the apyrexia and cessation of pain took place, the sulphate of quinine was prescribed, and the attacks were stopped.

It is needless to accumulate more facts from various practical writers, to prove that examples of visceral neuralgia may be found in nervous colicks, cholera morbus, periodical rheumatism, colica pictorum, &c. and that this disease, in its various shapes and domiciles, is still allied to, if not identified with—INTERMITTENT FEVER, not only as to cause, but as to treatment.

ANATOMICAL CHARACTERS. There are but few facts on record fit to demonstrate the nature of those lesions which constitute the trisplanchnic neuralgia. The difficulty of tracing the branches of these nerves, and still more of recognizing their physical lesions, renders this part of the investigation almost hopeless in the present state of neurological pathology. Lobstein, who has taken pains with the anatomy of the visceral nerves, especially the trisplanchnic, found, on several occasions, unequivocal traces of inflammation in their structure, in the bodies of those who had complained of abdominal pains during life.

“On opening the body of a pregnant female, who had died of severe attacks of periodical vomiting, by which she had been harassed for some months, accompanied by severe pain along the spine, Dr. Lobstein was unable to detect any trace of inflammation in the brain, spinal marrow, or any of the thoracic, abdominal, or pelvic viscera. Having removed the organs of the abdomen, he found the semilunar ganglion of an intensely red colour, and evidently inflamed. The trisplanchnic nerve was much larger than usual throughout its whole extent.”

The same accurate observer found, in a young girl of six years of age, who had been long alternately affected with obstinate cough and spasmodic vomitings, the left division of the solar plexus highly inflamed, whilst the right was perfectly healthy. But it must be confessed that we have much, or rather every thing to learn respecting the morbid anatomy of the ganglionic nerves. The facts which we have brought forward in these two papers of M. Jolly, and the facts and rea-

sonings which we shall shortly lay before our readers in the review of Dr. Macculloch's work, will, we hope, convince them that neuralgia is not confined to the nerves of relation, but extend also to the ganglionic system. The subject is highly deserving of attention, and its investigation will amply repay the labour expended on it. The periodical character of these visceral pains is too generally overlooked—the nature of the complaint is mistaken—the treatment is ineffectual, and not seldom injurious. Even since the commencement of this paper, we have seen several cases where patients were harassed with local and general bleeding for pains in the head, the hypochondria, and the stomach, which turned out to be *neuroses*, and not *phlogoses*, after all! We need not say that, when a practitioner is obliged to veer round from venesection to bark and arsenic, the patient naturally enough asks himself how it is that the Doctor did not give that medicine at first which cured the disease at last. These are occasions in which we cannot always veil the mistakes which we make, and, therefore, we have the more need to look sharply into the character of the maladies we are treating.

We shall wind up this memoir with one or two of the general conclusions, or rather inferences, drawn by our author, and which appear to us to be well-founded.

1mo. That which distinguishes the visceral from the external neuralgiæ, is the greater severity of the pain in the *latter* class, which generally comes on in the evenings; whereas the visceral neuralgiæ are worse in the morning, and become mitigated in the evening.

2do. Both classes of these neuralgiæ have the following characters in common, namely, a *preceding* malaise, nausea, chilliness, some præcordial anxiety—an *accompanying* irritation and afflux of blood, with or without febrile action—a termination in perspiration or sedimentous urine—and, finally, intermissions between the paroxysms. These neuralgiæ, in both classes of nerves, cede to the same therapeutic means—and generally leave no cognizable trace of their existence after death, either in the nerves themselves, or in the organs to which these nerves are distributed.”—*Bib. Med. Juin, 1828.*

Ct. DR. LONG—CONSUMPTION.

Among the *hallucinations* of the day, is the wide-spreading fame of the above-mentioned Doctor (whose degree in medicine was, we suppose, conferred by the MAN in the MOON) for the cure of phthisis! The Doctor's remedy is so invaluable, that we understand he causes the patient to swallow it in his own presence, lest any analysis should be made, and its nature ascertained. The Doctor's generosity is unbounded, for he gives the medicine “*free gratis*”—and merely charges the trifling sum of one guinea each day for the trouble of seeing it swallowed. The fame of the Doctor, like FAME of old, is reaching above the clouds—and all ranks, gentle and simple—or rather gentle and *simple*, are repairing to the learned Doctor for the cure of consumption! We have seen several of his cures, and also of his failures. The following case, which presented itself this very day (20th Aug.) will serve as a specimen of the *kind* of consumptions, and of the wonderful cures of that disease, which are so much bruited about—especially in that prostituted, venal, and talentless journal, the LITERARY GAZETTE.

A young man residing near Kensington, who had embarked in some business, and soon lost the whole of his little property, became despondent, dyspeptic and *lost his flesh*. These were symptoms, especially the last one, which left no doubt in his own mind, or in that of his friends, that he was in a “*rapid decline*.” The family practitioner failed to effect a cure—for alas, the cause was in the mind—and Dr. Long was applied to. The young man had neither cough, expectoration, fever, Dyspnœa, or a single symptom of phthisis, save the *loss of flesh*—but this was quite enough, in the Doctor's eyes, to constitute “*consumption*,” especially as the patient complained of wandering pains about the sides, shoulders, and pit of the stomach. What the internal medicine was on this occasion, we do not pretend to know; but, on stripping the chest, we found the whole surface covered with pustules produced by tartar-ematic. This powerful irritation on the surface had masked, or probably removed all the wandering pains; and it was confessed by the patient that Dr. Long had done him more good than the regular practitioner. But

the emaciation went on, and, therefore, Dr. Long had failed to remove the main source of alarm. On examination by the stethoscope and percussion, the lungs were found to be perfectly sound. The tongue was foul, the epigastrium tender, the appetite bad, the digestion painful, the mind irritable and despondent, the urine sometimes pale, sometimes lateritious—in short, the patient was labouring under dyspepsia in an aggravated form, attended, of course, with *loss of flesh*. This was one of the cases of consumption which Dr. L. undertakes to cure—and we have no doubt that such cases constitute nine-tenths of those which—do *not die* under the Doctor's care. It is true he does not cure them ; but, as they are considered to be in a galloping consumption, their not dying at the time, and their ultimate recovery by the powers of Nature, are signal triumphs of the Doctor's skill.

We should not have deigned to blot a page of our work with the notice of such an animal as Dr. Long, had we not been applied to by medical men in distant parts of the empire, who were importuned by the friends of patients to learn the medical character of this piece of affrontery. The present short notice is all that is necessary, as our readers will readily draw their own conclusions—and they can present inquiring patients with this portrait of the consumption-curer, if their own testimony is doubted.

We cannot, however, close this article without again expressing our indignant contempt of that sink of prostitution, the LITERARY GAZETTE. If, for a paltry premium, they have trumpeted forth the mendacious cures of consumption by such an impudent medicaster as Dr. Long, in order to deceive the unsuspecting sufferer and tamper with his pocket and his health, they deserve the reprobation of the public at large. If they have opened their columns, *through ignorance*, to designing knaves, who are paid for these fulsome puffs, they are scarcely less culpable—and not at all less despicable.

65. MELANOSIS.

Messrs. Trousseau and Leblanc have been making some extensive researches into

this strange and dangerous disease, at the Veterinary School of Alfort. Melanosis is extremely common in horses—scarcely does a white or grey horse die without presenting more or less of this malady. The investigation of these gentlemen leave little or no doubt that melanosis is a morbid secretion, or rather a morbid condition of the blood. The following examination will support this opinion.

“On opening the chest of an old white horse, whose body presented innumerable melanic masses, we were surprised at the singular appearance which the pleura pulmonalis presented. It seemed completely marbled or speckled with blue, black, and violet spots. These spots sometimes united and formed groups, between which the pleura was of its ordinary colour. There was no saliency of the pulmonary tissue in these places. In these aggregations, the membrane appeared as if sprinkled with large drops of mulberry juice. The pleura was carefully detached, and spread upon glass. It was then examined by the aid of a good microscope. The membrane was every where transparent in the interstices ; but where it covered the spots, it was slightly opaque or faintly red. The spots appeared to be a kind of petechiæ—or rather an effusion of some colouring matter into the membrane and its subjacent cellular tissue. Not the least trace of vascularity could be discovered by the microscope—but simply an agglomeration of sanguineous globules, which, in the centres of the spots or strains, were too numerous to be distinct, but easily cognizable at the margins. The largest and deepest-coloured spots, the globules were perceived to be jet black. The pulmonary tissue was sound, except that, immediately opposite the pleural stains, it was rather inclined to hepatization.”

M. Rigot has also remarked numerous ecchymoses on the serous membranes of horses presenting melanosis in other parts, and these ecchymoses he considers as the first degree of the malady. It appears to our authors, in fact, that blood is first effused, and that it subsequently becomes transformed into the melanic matter.

These depositions are not peculiar to any particular part or tissue of the body. They have been found pervading all the

different structures. They do not exert that deleterious influence on the animal economy which scirrhus and fungoid tumours produce. It is only when they soften down, or when they enlarge to such a size as to incommode the functions of contiguous organs, that they become dangerous. The authors of this memoir have seen numerous horses which have presented very large masses of melanosis, and yet enjoyed good health to the last. —*Archives Générales.*

66. REMARKABLE CASE OF SPECTRAL ILLUSION, APPARENTLY CONNECTED WITH SOME LOCAL MORBID ACTIVITY OF THE BRAIN.

The following narrative (lately read at the London Phrenological Society) appears to be drawn up without any theory, and without any belief in the *reality* of the phenomena which presented themselves, not merely to the eye of the mind, but to the material organ of vision. The gentleman who records, and was the subject of, the spectral illusions, is a learned member of the English bar.

"In December, 1823, A. was confined to his bed by inflammation on the chest, and was supposed by his medical attendant to be in considerable danger. One night, while unable to sleep from pain and fever, he saw, sitting in a chair, on the left side of his bed, a female figure, which he immediately recognized to be that of a young lady who died about two years before. His first feeling was surprise, and perhaps a little alarm; his second, that he was suffering from delirium. With this impression he put his head under the bed-clothes, and after trying in vain to sleep, as a test of the soundness of his mind he went through a long and complicated process of metaphysical reasoning. He then peeped out, and saw the figure in the same situation and position. He had a fire but would not allow a candle or nurse in the room. A stick was kept by his side, to knock for the nurse when he required her attendance. Being too weak to move his body, he endeavoured to touch the figure with the stick; but, on a real object being put upon the chair, the imaginary one disap-

peared, and was not visible again that night.

"The next day he thought of little but the vision, and expected its return without alarm, and with some pleasure. He was not disappointed. It took the same place as before, and he employed himself in observations. When he shut his eyes or turned his head, he ceased to see the figure; by interposing his hand he could hide part of it; and it was shown like any mere material substance, by the rays of the fire which fell upon and were reflected from it. As the fire declined it became less perceptible, and as it went out, invisible. A similar appearance took place on several other nights, but it became less perceptible, and its visits less frequent, as the patient recovered from his fever.

"He says the impressions on his mind were always pleasing, as the spectre looked at him with calmness and regard. He never supposed it real; but was unable to account for it on any philosophical principles within his knowledge.

"In the Autumn of 1825, A.'s health was perfectly restored, and he had been free from any waking vision for nearly eighteen months. Some circumstances occurred which produced in him great mental excitement. One morning he dreamed of the figure, which stood by his side in an angry posture, and asked for a locket which he usually wore. He awoke and saw it at the toilet, with the locket in its hand. He rushed out of bed, and it instantly disappeared. During the next six weeks its visits were incessant, and the sensations which they produced were invariably horrible. Some years before he had attended the dissection of a woman in a state of rapid decomposition. Though much disgusted at the time, *the subject* had been long forgotten; but was recalled by the union of its putrescent body with the spectre's features. The visits were not confined to the night, but frequently occurred while several persons were in the same room. They were repeated at intervals during the Winter; but he was able to get rid of them by moving or sitting in an *erect position*. Though well, his pulse was hard, and generally from 90 to 100." 211.

* Phren. Journ. No. XVIII. Aug. 1829.

The narrator is a gentleman of good education and literary habits who never considered the phenomena as any other than illusions. There are others, of a similar kind, on record; and they can only be accounted for by some local morbid action going on in the brain. It is needless to say that in a credulous person, the above phenomena would have produced a complete conviction of the *reality* of the figure which paid its nightly visits—in other words, of the reality of ghosts. Samuel Johnson would assuredly have believed in the reality of the apparition.

67. THE MIDLAND MEDICAL AND SURGICAL JOURNAL.

The appearance of a provincial Medical Journal is a novelty in this country, though not so on the Continent. It is not a little remarkable that Glasgow and Worcester should each send forth a quarterly medical journal, while all Ireland cannot, or rather *will not*, produce a single specimen of what is universally allowed to be a useful vehicle of professional information! We believe we could assign very probable causes for this circumstance, but we do not deem it necessary on the present occasion. Ireland presents an anomaly in *politics* as well as in *medical literature*, and we suspect that the *former* has more influence on the *latter* in the Emerald Isle than on this side of the Channel. Be this as it may, the birth of a provincial medical journal may fairly excite some reflections. The general opinion, as far as we have been able to learn, is unfavourable to the success of such an undertaking; though, in no one instance, has the predictor been able to assign any valid reason—or, indeed, any reason at all, for this ominous prediction. We were pondering on the solution of this knotty question the other day, while walking past Charing Cross, that immense confluence of the various tides of human existence, when we cast our eyes on a splendid boot shop, where it was emphatically announced that none but *town-made* boots were sold. On inquiry, we found that *boots* are infinitely better if they happen to be made in the smoke of London, than if manufactured in the clear air of the country. We

asked the reason. There were no less than two reasons. The materials were better—the workmanship was superior. As a necessary consequence, the manufactured article was much dearer. Here then was some clue to the solution of the prejudice above-mentioned. If *town-made boots* are better than country-made articles, why should not *town-made books* be superior to those manufactured in the country? By such analogies and by such ratiocination, however absurd, the great majority of mankind are guided. But to reason a little closer. If it be true that medical science is founded on observation, then we cannot conceive why facts and observations recorded in the country, should not be as valuable as those recorded in the metropolis. It is true that the capital of a country attracts talents—but it also attracts every thing capable of alloying talent. If books are better composed in London than elsewhere, they are like the bread there—fair to the eye, but poisonous to the stomach. The MIDLAND REPORTER may not know—

the city journal's art,
Whose frothy pertness charms the vacant heart;

nor open its venal columns as the channels of public calumny, to gratify personal spite. Its editors have a "stake in the country"—they have characters to lose—and, therefore, they will not endeavour to degrade the profession to fill their pockets.

We have heard it said that the MIDLAND REPORTER cannot stand. We doubt the truth of this prediction. If it were set on foot as a pecuniary speculation, to extricate its conductors from the rules of the FLEET or KING'S BENCH, then we candidly confess our fears that the Editors would long remain in those dreary haunts. They are not the people calculated to "raise the wind" by tales of terror—midnight assassins—portentous conflagrations—unnatural crimes—or revolutionary insurrections.† They write not for bread—they write not for gain—but for the good of their profession, and

* "Nocturnos lemuris, portentaque Thessala,
Terroris magicos." —Hor.

† By the way, where is the surgical legion that was to have overwhelmed the House of Commons with petitions, and stormed the citadel in Lincoln's-Inn-Fields? Not a voice responds to the plaintive notes of the taneluf instrument!

with the laudable wish to signalize themselves by their contributions to medical science. These objects will be obtained by even a very limited circulation of the *Midland Reporter*, since the contents of the work will be dispersed through various channels, over every country which—

“The rising or the setting sun surveys.”

It will be a shame for the midland counties—for the profession at large, if three or four hundred subscribers cannot be found to pay the primary expenses, beyond which nothing else is sought or expected. Every book-society in the kingdom should encourage a work, whose sole object is to report such useful facts as occur in hospital or private practice. These unassuming labours *ought to be* acceptable to all parties—to all ranks of the profession—and we sincerely hope they *will* prove so. In the mean time, we hesitate not to say, that we have felt some disappointment in the first No. of the work under consideration. The Essays on “Medical Topography” promise to be too prolix, and excursive into regions of investigation that have little connexion with the subject. Neither do we think that the article on fever is exactly suited for publication, however well it might have been adapted for the occasion which first gave it birth. But it is not fair to judge by “the first appearance on any stage,” and we have no doubt that the *MIDLAND REPORTER* will soon take a respectable station among the medical journals of the day.

68. ENORMOUS HYPERTROPHIA CORDIS—
DISEASE OF SEMILUNAR VALVE—DISEASED
STRUCTURE OF LIVER—(EDEMA
OF THE MUCOUS MEMBRANE OF STOMACH
AND BOWELS, &c.

We are sorry to record the death of a med-

The lyre is hung on the weeping willow—and sighs to the passing winds, while deploring the ebbing tide of human passions, no more to be hurried along under the influence of another *LUCIFER*. In thus turning a deaf ear to the declamations of self-interest, the profession has shewn symptoms of penetration, that are not lost or unperceived in the proper quarter!!

ical gentleman, in the prime of life, or rather of youth, and whose talents and amiable character promised to render him an ornament to our profession. Dr. Cox, author of a *Treatise on Rheumatism*, a *Dispensatory*, &c. went out, about three years ago, to the Caraccas, as physician to our Consul there, Sir Robert Kerr Porter, and returned from thence about the beginning of November, 1827. Shortly after his arrival he was seen by the Editor of this Journal, who examined his chest with attention. The action of the heart was excessive—the organ beat over a large space—the arteries throbbed violently—the jugular veins pulsated—the “*bruit de scie*” was very distinctly heard—the respiratory sound was audible in all parts of the chest, which also sounded well on percussion. Dr. Cox appeared very much agitated and nervous; it was, therefore hoped that part, at least, of the great action of the heart was attributable to nervous palpitation. The countenance was pallid, and inclined to be sallow—the breathing was disturbed by exertion, especially by ascending stairs or high ground. In other respects, there was no apparent disorder of any organ in the body. Each subsequent examination tended to increase the fear, that active enlargement of the heart was going on, and, in this opinion, Dr. Clark, and several other medical friends, concurred. It was rather remarkable, however, that two or three glasses of wine invariably lessened the action of the heart, and ameliorated the patient's distressing feelings—especially the pain in the region of the heart, of which Dr. C. often complained. Local depletion, counter-irritation, digitalis and diuretics, were long and vigorously employed, but not, we believe, with any decided effect. Dr. J. lost sight of the patient for seven or eight months, and did not see him till the 10th of August, ten days before the fatal termination of the disease. Dr. Cox called on Dr. Johnson, and stated that his complaint had recently taken an entire new turn. The distress in the region of the heart was greatly mitigated, and his principal sufferings were referred to the epigastrium, which was so exquisitely tender, and withal so prominent, that a physician that morning thought there was acute inflammation and enlargement of the liver. On examination of the chest,

there did not appear to be any change in the physical signs of hypertrophy of the heart—on the contrary, they seemed all to have increased. But the tenderness and pain in the epigastrium (where, by the way, there was a tremendous pulsation,) masked the other feelings, or engrossed Dr. Cox's entire attention. Leeches, blisters, two general bleedings, gave little or no relief. The breathing became so embarrassed that he was obliged to be propped up in bed, and he expressed himself as always on the brink of suffocation. In this dreadful state he lingered till Wednesday, the 20th August, when death put a period to his sufferings.

The body was examined by Dr. Hodgkin, in presence of Mr. Morrah, Dr. Johnson, and two medical students. The surface was slightly tinged yellow, and the ankles were œdematous. In the chest there were better than three pints of reddish serum, but no marks of inflammation. The heart was so enormously enlarged, that neither Dr. Hodgkin, Mr. Morrah, nor Dr. Johnson, had ever seen one of such a size before. The cavities were dilated as well as the parietes thickened. There was nothing the matter with the mitral or tricuspid valves; but one of the semilunar valves of the aorta was dilated into a pouch that would receive the end of the thumb up to nearly the first joint. The inner coat of the aorta, opposite to this valve, was thickened and irregularly raised. There was no other morbid appearance in the arterial system. The lungs, especially on the left side, were condensed, but not like hepatization from inflammation. In the upper lobe of the right lung was found some small masses of calcareous deposit, and the remains of a tuberculous excavation, completely lined with a shining membrane, and communicating with one of the bronchia. The liver was rather smaller than usual, hard, and curiously mottled with yellow and red specks, so as to present an extremely diseased appearance. The spleen was very much indurated, and carnified. But the most remarkable phenomenon in the abdomen was the state of the mucous membrane of the stomach and intestines. Besides a very minute injection of the vessels, the membrane was, in a very great extent of surface, completely *œdematous*. The rugæ in the intestines presented the appearance of

bladders filled with a thick but pretty clear fluid, as in some blisters.

Dr. Hodgkin was of opinion that the state of the semilunar valve in the aorta, as above detailed, might be the cause of the hypertrophy, as not only keeping up irritation in the neighbourhood of the ventricle, but as checking the issue of blood from the left side of the heart. The writer of this notice cannot entirely coincide with Dr. H. on this point. The action of all tangible arteries was in proportion to that of the heart, and there did not appear to be the least check to the issue from the ventricle into the aorta.* The patient had had acute rheumatism, and this, combined perhaps with a faulty constitution from birth, may have determined the disease of the heart. The dissection was interesting in another point of view. It shewed the natural cure of a tuberculous excavation—in short, Dr. Cox must, at one time, have had tuberculous expectoration, or, in other words, phthisis. Considering that two if not three of his brothers died of phthisis, it is remarkable that a broken down tubercle should have terminated favourably in such a constitution. There were no other tubercles, however, in the lungs. The patient bore his dreadful sufferings during the last ten days of his life, with heroic firmness of mind, although he was conscious of the fatal nature of the malady!

69. SENSES OF SMELL AND SIGHT IN CERTAIN BIRDS OF PREY.

It always appeared to us most extraordinary—indeed unaccountable, that birds of prey could *scent* carcasses at such im-

* The rush of blood, however, past this enlarged valve, at each stroke of the ventricle, was evidently the cause of the "BRUIT DE SCIE," or "stroke of a saw," which was heard corresponding with the pulse and the ventricular contractions. It is difficult to conceive the cause of this enlargement of the valve in a direction *contrary to the current* of the blood. The only way in which it can be accounted for, is a frequent attempt at *retrogradation* in the circulation through the aorta, as it is only then that the semilunar valves can be put on the stretch.

mense distances as they are said to do. We were led to scepticism on this subject, some 20 years ago, while observing the concourse of birds of prey from every point of the horizon, to a corpse floating down the river Ganges—and that, during the north-east monsoon, when the wind blew steadily from one point of the compass for months in succession. It was extremely difficult to imagine that the effluvia from a putrefying body in the water could emanate in direct opposition to the current of air, and impinge on the olfactories of birds many miles distant. Such, however, were the DICTA of natural history, and we could only submit to the general opinion. We have no doubt, (now that we know general opinion to be sometimes wrong,) that it was by means of the optic rather than the olfactory nerves, that the said birds “smelled out their suit.” The TOUCAN is a bird which ranks next to the vulture in discerning (whether by sight or smell) the carrion on which it feeds. The immense size of its bill, which is many times larger than its head, was supposed to present, in its honey-comb texture, an extensive prolongation of the olfactory nerve, and thus to account for its power of smelling at great distances. But, on accurate examination, the texture above-mentioned in the bill is found to be mere diploe to give the bill strength. Now the eye of this bird is somewhat larger than the whole brain, and it has been ascertained by direct experiments, that, when very putrid carrion was inclosed in a basket, from which the effluvia could freely emanate, but which concealed the offal from sight, it attracted no attention from vultures and other birds of prey, till it was exposed to their view, when they immediately recognized their object, and others came rapidly from different quarters of the horizon, where they were invisible a few minutes before. This sudden appearance of birds of prey from immense distances, and in every direction, however the wind may blow, is accounted for by their soaring to an altitude far beyond our sight. In this situation, their prey on the ground is seen by them, however minute it may be, and therefore their appearance in our sight is merely their descent from high regions of the atmosphere to within the scope of our optics. The toucan in India generally arrives a little in the rear of the vulture, and remains till the larger bird is glutted—while smaller birds of prey, at a still more re-

tired distance, pay similar homage to the toucan!

70. CASES OF RETROVERSIO UTERI. By WILLIAM WEIR, M. D.

In the last number of our Glasgow Contemporary, Dr. Weir, one of the surgeons to the City poor, has published two cases of this complaint, which we shall here, notice. They both terminated favourably, and both the females are now living.

Dr. W. conceives that, although pregnancy is not essentially necessary for the occurrence of this accident, yet some enlargement of the uterus must have preceded the retroversion. It generally takes place about the third or fourth month of utero-gestation. At this period, more particularly in women who have the brim of the pelvis rather contracted, and the general cavity wider than natural, the fundus is liable to fall backwards upon the rectum, the os uteri being turned upwards upon the symphysis pubis.

Case 1. “The first was a married woman, aged 48, the mother of ten children, the youngest five years old. I was called to her on the 6th November, 1818. She had been complaining for about a fortnight, of occasional severe pains in the region of the bladder and uterus, stretching down the thighs, and coming on “in showers” similar to labour-pains, but often more severe. She could not pass urine but in drops, had a constant desire to go to stool, with much straining and distressing tenesmus, but very scanty evacuations. The distended urinary bladder was distinctly felt above the pubes, She had not menstruated for three months, though previously regular, and she attributed her complaints to extreme costiveness, occasioned, as she thought, by improper diet, and producing excessive straining every time she went to stool. Three pounds of urine were drawn off by the catheter, with considerable relief. The instrument being in some degree obstructed, while passing into the bladder, led me to examine the vagina, when I discovered a hard tumour lying in the hollow of the sacrum, between the rectum and bladder.

Firm pressure produced considerable pain, and great inclination to go to stool. The os uteri was discovered lying close upon the symphysis pubis, pressing upon the urethra. This tumour could also be felt by the finger introduced into the rectum. Fourteen ounces of blood were taken from the arm, a purgative enema exhibited, and fomentations ordered to the abdomen. In the evening the catheter could not be introduced, the injection had produced no effect, she had passed no urine, and next day, (7th,) she was greatly worse, with much thirst, foul tongue, and pulse 100. The instrument was now introduced with some difficulty, and the bladder emptied. Purgative enemata, with occasional doses of calomel and jalap, procured, some evacuation from the bowels, and the urine was drawn off morning and evening. The warm bath, with leeches to the vulva, had the effect of relieving the severe tenesmus and distressing bearing-down efforts. On the 12th, while in the bath, she succeeded in passing a great quantity of urine, and some hours afterwards, she again made as much, after which, the symptoms became more manageable and gradually gave way. On the 16th, she had a copious and formed stool for the first time since her illness; the previous evacuations from the bowels having been all along either liquid, or of a flattened form, as if the sides of the intestine had been kept nearly in contact by the tumour. For some time after this, she was occasionally troubled with tenesmus, and had a more frequent desire than natural to pass urine, which symptoms were relieved by opiate injections. In a few weeks, she got quite well, and is at present in good health."

In this case there was no pregnancy; but Dr. W. believes there was enlargement of the womb, the patient being about the change of life.

Case 2. This was a most formidable one, and nearly proved fatal. The patient was a widow, aged 39, and had borne several children. She firmly denied pregnancy. She complained of the same symptoms described in the preceding case—but especially of the severe bearing down pains. She had been ill for three weeks—and had taken strong purgatives, (for the purpose of procuring abortion, as

was afterwards ascertained,) that operated violently. Her urine has been dropping away involuntarily for two or three days—the belly was swollen, and immediately above the pubes there was a firm tumour, painful on pressure.

"The finger, introduced into the vagina and directed towards the os coccygis, was prevented going far, by a hard tumour lying in the hollow of the sacrum. On turning the finger upwards before the symphysis pubis, the same tumour was felt pressing upon the urethra, and preventing the free evacuation of the urine. It was also discoverable by the rectum, keeping the sides of that intestine together, so as nearly to obliterate its cavity. After the most careful examination, the os uteri could not be discovered in any direction. She had not menstruated for three months, but denied being pregnant. The catheter was introduced without much difficulty, and 2lbs. of urine drawn off. An ounce of castor oil was given, and an anodyne draught ordered at bedtime. Next day, 1st November, there was no change for the better; the physick had operated, the stillicidium urinæ continued, and 4 lbs. of urine were drawn off by the catheter. The swelling of the abdomen appeared considerably less, but there was still a hard firm tumour immediately above the pubes; and although no more urine would flow, I did not consider the bladder completely emptied. There was now considerable œdema of the legs, thighs, and lower part of the belly. On the 2d November, the tumour was felt nearer the orifice of the vagina, and the distressing tenesmus and bearing-down efforts were more severe. The stillicidium continued, the belly was much swollen, and the bladder seemed full of urine. I experienced considerable difficulty in introducing the catheter. It went in a certain way easily, and about 2lbs. of urine flowed through; but although it was quite evident that much remained in the bladder, no more could be obtained, and the tumour prevented the instrument passing any farther up. Elastic gum and silver catheters, male and female, of different sizes, were tried, the patient being placed in various positions, but they were stopped after being introduced about three inches.* A small

* "Mr. Syme, who relates a case of

quantity of laudanum was occasionally thrown into the rectum, which relieved the irritation; but a purgative injection which was this day prescribed, could not be got in. I had now the assistance of my friend, Mr. Stirling, in the management of the case, and several other medical gentlemen occasionally visited her. On the 3d and 4th, she continued much in the same way; but the introduction of the catheter, which was attempted morning and evening, gradually became more difficult, less urine could be got away, and the abdomen increased in size almost every hour. On the 6th, the bladder was felt considerably above the umbilicus, and the fundus of the womb was getting lower in the pelvis. The catheter could still be introduced three inches, and to-day 2 lbs. of urine came away, but with little diminution in the size of the abdomen."

It was proposed to puncture the bladder above the pubes, but the patient would not consent. Things got worse and worse, till the following deplorable condition obtained.

"On the morning of the 9th November, the swelling of the abdomen was much increased, and she had paroxysms of severe pain almost constantly. The catheter brought away only four ounces of urine. The anasarca of the limbs and integuments of the abdomen, had increased greatly. There was considerable fever, with great thirst, furred tongue, and quick pulse. About mid-day, she was seized with the most severe pains, which continued almost without intermission, and were evidently those of labour. A con-

Retroversion in the Medical Observations, (vol. iv. p. 392,) mentions, that the catheter was with difficulty introduced "an inch or two," and afterwards it seemed to pass rather *farther up the urethra*, but only drew off a spoonful or two of urine.

"In Dr. Cheston's patient, he had to introduce a long male flexible catheter half its length, before any urine came away; and even after it was in three-fourths of its length, he did not draw off 'such a quantity of urine as sensibly to diminish the swelling of the abdomen.'"
—Medical Communications, vol. ii.

sultation was called at five o'clock, P. M. On examining the state of the parts, we found the tumour now lying quite at the entrance into the vagina. The uterus appeared to be almost turned upside down; it lay impacted between the rectum and bladder, and it was with much difficulty that any examination could be made, owing to the strong action of the abdominal muscles forcing the contents of the pelvis downwards, and preventing the introduction of the fingers into the vagina. The pains were constantly present, and it appeared that the uterus was endeavouring to expel its contents, but which could not be accomplished while the os uteri remained in its unnatural situation. There was acute fixed pain in the back and at the bottom of the abdomen, immediately above the pubes. All the gentlemen were of opinion, that if some relief were not obtained, the patient could not survive long. There was now no hope that the uterus could replace itself. The action tended all the other way. The strong muscular exertions of the patient forced the fundus still lower and lower. The question was, What could be done for her relief? Puncturing the bladder above the pubes was now considered quite inadmissible; inasmuch as merely emptying the bladder would have little effect in bringing down the mouth of the womb, and could not be expected to render any manual operations more easy, or more likely to be successful. One gentleman proposed that the fundus of the uterus should be punctured, which would allow the liquor amni to escape, and reduce very materially the size of the tumour. Previous to deciding upon this proposal, it was agreed to make a last attempt to reach the os uteri, more particularly as Mr. Stirling believed, that at a former examination, he had touched with his finger the posterior lip lying high up above the pubes. Accordingly, after much difficulty, and a great degree of force, and in opposition to the strong and powerful exertions of the patient, which all tended to prevent its admission, I succeeded in getting my hand into the vagina, forced up my finger above the pubes, and reached the mouth of the womb. An assistant at the same time got his hand into the rectum, and we had thus the perfect command of the patient. By steadily pushing upwards the fundus, and cautiously pulling the neck and mouth of the womb downwards, the tumour was gradually raised above the promontory of the sa-

crum, and the uterus reduced to its proper position. Considerable quantities of urine had been evacuated during the operation, and previous examinations. The labour continued; and now, after the uterus was freed from its firmly impacted state, the pains assisted to bring it still more perfectly into its natural situation.

"It was ascertained that the membranes continued unbroken, the os uteri being little dilated; but after a few pains, the waters came away, and a leg and thigh were protruded. The abdomen had fallen greatly, was much softer, still tender when pressed upon, and the firm tumour, formerly observed immediately above the pubes, had now disappeared. The os uteri was not much dilated; and although the labour pains continued pretty strong for some time, they afterwards fell off, and the fœtus made no progress for twenty-four hours. At this time she was seized with a severe rigor, and strong bearing-down efforts. A medical gentleman in the neighbourhood saw her immediately, and thought it proper to extract the fœtus, the os uteri being then well dilated. The child was brought away mutilated; it was apparently about the fourth month, and somewhat putrid. The patient had passed urine naturally several times since the replacement of the uterus."

Severe abdominal inflammation supervened, and was checked by vigorous depletion. She perfectly recovered. The above case is very creditable to the courage, dexterity, and skill of the medical attendant. It may suggest some useful hints to our obstetric brethren.

71. CASES OF ORGANIC DISEASE (SEVERAL TUBERCLES) OF THE CEREBELLUM.
By M. RENNES, Physician to the Military Hospital of Strasburgh.

The functions of the cerebellum have, of late years, caused much discussion among physiologists and phrenologists, and many a poor animal's brain has been sliced to determine the relative functions of parts, without deciding the questions at issue. It is probably by morbid anatomy, after all, that we shall be able to localize the

organs, and assign to them their proper uses and powers. The following case is interesting in a simple pathological point of view, and we shall briefly record it.

Case. A young soldier, aged 21 years, of slender constitution, was admitted into the Military Hospital of Strasburg, on the 1st of January, having been two months in the Hospital of the Royal Guard. M. Rennes now watched the case narrowly, day by day. The patient complained of acute and deep-seated pain in the back part of the head—sleepiness—debility. He was greatly emaciated, and vomited his food—lay on his right side in bed—was morose and taciturn—and complained reproachfully of the inefficacy of medicine in his case. The pulse was small and frequent—skin dry and harsh—eye hollow and expressive of great suffering—tongue natural—no appetite—slight uneasiness at the epigastrium—most indomitable constipation. These symptoms, especially the pain in the occiput, and the vomiting of every thing taken, continued in despite of leeches, blisters, &c. and death put a period to the patient's sufferings on the 16th February.

Dissection. There was some water in the ventricles of the brain, which was much softened in its structure. There was one large tubercle in the left lobe of the cerebellum, and several in the right lobe. The substance of the cerebellum was healthy, even in the immediate neighbourhood of the tubercles. There were some traces of inflammatory action in the mucous membrane of the stomach.

The above case has been brought forward by M. Rennes, in opposition to phrenology—though in what way it can afford matter of argument for the anti-phrenologists, we are at a loss to imagine. Tubercles were developed in the cerebellum we allow—but the intervening substance of that organ was healthy. Surely the cerebellum, in such circumstances, might carry on its functions as well as the lungs when tuberculated. But we have noticed this case on account of the obstinate vomiting which evidently was dependent on the cerebellic affection. We have seen three instances where vomiting was the most prominent and distressing feature of the complaint during life, and where dissection shewed no disease of the stomach, but tubercles in the cerebellum. The case lately published by Dr. Chambers, from St. George's Hospital, is another example of the same kind.

72. REPORT OF THE ANATOMICAL COMMITTEE.

The following highly interesting document deserves permanent record on our pages, as marking an important æra in the progress of medical science—an æra, in which the light of reason and truth has penetrated into the darkest recesses of the human mind, and begun to dissipate its most rooted prejudices.

REPORT.

The peculiar nature of the subject which the Committee were appointed to investigate, has induced them to inquire principally into the practice of the anatomical schools of London, where by personal communication with the most eminent surgeons and with the students and principal teachers of anatomy, it could be fully ascertained that no detriment to their interests was to be apprehended from the publicity to arise out of the present inquiry. With regard to the practice of the provincial schools, to avoid the expense of summoning witnesses from a distance, they have been satisfied with written communications from resident professors or practitioners of eminence, which will be found in the Appendix.

The Committee have inquired into the nature of the difficulties which the anatomists have here to contend with, whether arising out of the state of the law or an adverse feeling on the part of the people; and into the evil consequences thence ensuing, as well to the sciences of medicine and surgery as to all who study, teach, and practise them, and eventually to the members of the whole community. They have called witnesses to show in what manner the wants of the anatomist are provided for in several foreign schools, and to state their opinion whether similar methods could be applied with advantage in this country, and if applied would be adequate to remove the present difficulties.

The first origin of these difficulties is obviously to be traced to that natural feeling which leads men to treat with reverence the remains of the dead; and the same feeling has prompted them, in almost all times and countries, to regard with repugnance and to persecute anatomy.

As the importance of the science to the well-being of mankind was discovered, the governments of different states became its protectors, and in this country particularly, by the statute of Henry VIII. protection to a certain extent was given and intended to be given to it; but that protection, which at first perhaps was fully adequate, owing to the rapid progress of

the science, has long since become wholly insufficient.

How limited were the wants of the science in the former part of the last century may be learned from the lectures of Dr. William Hunter, who describes the professors of the most celebrated schools, both at home and abroad, as employing in each course of lectures not more than one, or at most two subjects, and as exhibiting the performance of the operations of surgery, not on human bodies, but on those of animals. He represents the students in medicine and surgery as never exercising themselves in the practice of dissection, because for such practice they had no opportunities.

For such a system of instruction the provisions of the statute of Henry VIII. might well be adequate, and these provisions, indeed, may now be considered of importance only as a distinct admission of the principle, that the government of this country ought to protect anatomy. The reformation of this antiquated and imperfect system took place in this country in the year 1746, when Dr. William Hunter, having a singular enthusiasm for the science, established complete courses of anatomical lectures, and opened a regular school for dissection. The reform thus introduced was complete, and its author exulted before his death in having raised and diffused such a spirit for dissection that he should leave behind him many better anatomists than himself.

Under his immediate pupils and their successors this school has gone on increasing. The earliest account that the Committee have met with of the number of anatomical students resorting to London, is that given by Mr. Abernethy, who states that shortly after the breaking out of the war with France they amounted to 200. One of the witnesses, Dr. Macartney, computes their number in the year 1798 at 300; and Mr. Brookes, a teacher of anatomy, in a calculation submitted to Sir Astley Cooper in the year 1823, then reckoned their number to be 1000. It appears from the returns now furnished by the teachers of the different schools in London, that their number at present is somewhat above 800; the diminution in the number since the year 1823 being the consequence, probably, of the pupils resorting to foreign schools, the advantages of which were less known at the former period than they are at present.

When it is considered what a demand there is for practitioners, as well to meet the wants of an increased population at home as of an extended empire of colonies and dependencies abroad, this rapid increase of students will not appear sur-

prising; and if it is considered also that not only is that demand an increasing one, but that every practitioner, however humble, from that laudable desire for intellectual improvement which characterizes the present age, endeavours, if he can afford it, to obtain a good education, and must regard himself as ill educated if he has not gone through a course of dissection, the eventual increase of dissecting students can hardly be calculated, should their wants be supplied abundantly and at a cheap rate.

Although the students now attending the schools of anatomy in London exceed 800, not more than 500 of this number actually dissect. The duration of their studies in London is usually sixteen months, and during that time the number of subjects with which every student in surgery ought to be supplied appears from the evidence (although there is some difference on this point) to be no less than three; two being required for learning the structure of the parts of the body, and one the mode of operating. The total number of subjects actually dissected in the schools of London in one year, is stated to be not greater than from 450 to 500, which is after the rate of less than one subject for each dissecting student; a proportion wholly insufficient for the purposes of complete education.

Dissection on an extended scale began in this country before there existed any such general feeling in its favour, founded on an opinion of its utility, that the British government, after the example of some foreign governments, would venture openly to patronize it. Accordingly, when in 1763, Dr. Hunter proposed to build an anatomical theatre, and to endow it with his museum and a salary for a professor, provided the government would grant him a site of ground for the institution, and his late Majesty would extend to it his countenance and protection, he met with a silent refusal. It was therefore only by stealth, and by means not recognized by the law, that the teacher was enabled to procure subjects. These means, it is notorious, from the time of Dr. Hunter down to the present time, have been principally disinterment; though of late other illegal modes and contrivances, such as stealing before burial, personation of relatives for the purpose of claiming bodies, &c. have occasionally been had recourse to. For some time after the first establishment of dissecting schools, while the number of teachers and students was small and the demand for subjects very limited, the means which were resorted to for obtaining a supply were adequate to the wants of the students, and bodies were obtained in abundance and cheaply. The exhumators at that time were few, and

circumspect in their proceedings; detection was rare, the offence was little noticed by the public, and was scarcely regarded as penal; so that (according to one of the witnesses) long after the decision of the judges, in 1788, that disinterment was a misdemeanor, prosecutions for this offence were not common, and offenders taken in the fact were usually liberated. If this state of things had continued, though the illegality of the practices had recourse to must be conceded, yet they could scarcely be said to occasion evils of such magnitude as to require a legislative remedy. But the number of students and teachers having greatly increased, and with them the demand for subjects and the number of exhumators, detections became frequent, the practice of exhumation notorious, and public odium and vigilance were directed strongly against the offenders. It may be collected from the debates in Parliament which took place in the year 1796, during the progress of a bill for subjecting to dissection the bodies of felons executed for burglary and robbery, that even at that time the public regarded disinterment with strong feelings of jealousy.

In proportion as the public became vigilant, the laws relating to sepulture were interpreted and executed with increasing rigour; and as the price of subjects rose with the difficulty of obtaining them, the premium for breaking the laws increased with the penalty. The exhumators increased in number, and being now treated as criminals, became of a more desperate and degraded character.

The parties of daring men who now took to raising bodies, did it happen (as was frequently the case) that, while in pursuit of the same spoil, they fell in with another, actuated by vindictive feeling, and regardless of the caution and secrecy on which the successful continuance of their hazardous occupation must depend, had contests in the places of sepulture, left the graves open to public gaze, or gave information to magistrates, or the relatives of the disinterred, against their rivals. Frequently, with a view to raise the price of subjects, to extort money, or to destroy rivalry, they have proceeded to acts of outrageous violence, tending to excite the populace against the teachers of anatomy. These, and similar acts of violence or imprudence, have been constantly bringing exhumation to light, and have exasperated the public against both the exhumator and the anatomist; and this to such a degree, that of late, in many cases, individuals, out of solicitude to guard the head, have taken upon themselves to dispense with the laws of their country, and have fired upon parties attempting disinterment. Other circumstances, but of minor impor-

tance, have been assigned by some of the witnesses as augmenting the difficulty of obtaining subjects in London, or increasing the demand for them; but as regards them, the Committee beg leave to refer to the evidence itself. The general result has been, with some difference, according to differences of place and season (sometimes owing to the caprice and mercenary motives of the agents employed, at other times owing to the real difficulty of obtaining a supply,) that of late subjects have been to be procured, either not at all, or in very insufficient quantity, and at prices most oppressive to the teacher and student.

The price of a subject about thirty years ago, was from one to two guineas; the teacher now pays from eight to ten guineas; and the price has risen even to sixteen guineas. The teachers deliver subjects to their dissecting pupils at a lower price than that at which they purchase them, having been compelled to resort to this expedient, lest dissection in London should be abandoned altogether. The loss which they sustain is made good out of the fees which they receive for attendance on their lectures in the anatomical theatre. The cost of providing subjects is also enhanced to the teacher, by his being required occasionally to defend the exhumator against legal prosecution, and to maintain him against want, if sentenced to imprisonment, and his family, in case he has one, until the period of his punishment expires.

Nor is it only of a precarious, insufficient, and expensive mode of obtaining subjects that the cultivators of anatomy complain,—it is by the law, not as regards the exhumators, but as it affects themselves, that they are aggrieved.

The first reported case of a trial for disinterment is that of *Rex v. Lynn*, in the year 1788, when the Court of King's Bench, on a motion for an arrest of judgment, decided it to be a misdemeanor to carry away a dead body from a churchyard, although for the purpose of dissection, as being an offence *contra bonos mores* and common decency. In this state the law on the subject of disinterment, as interpreted by the Court of King's Bench, appears to have remained until the present year; when Davis and another were tried and convicted at the assizes at Lancaster, and subsequently received the sentence of the Court sitting at Westminster, for having taken into their possession, with intent to dissect, a dead body, at the time knowing the same to have been unlawfully disinterred. A respectable teacher of anatomy, residing at Liverpool, had been tried and found guilty on a similar indictment at

the quarter sessions at Kirkdale, in the month of February in the same year. With these exceptions, magistrates appear hitherto to have taken no cognizance of receiving into possession a dead body, unless there were strict evidence that the receiver was a party to the disinterment; and on this practical view of the state of the law, professional men also appear hitherto to have acted. At present, however, a most intelligent magistrate, one of the witnesses, considers that very slight evidence would connect the receiver with the disinterment; and that the purchase from the exhumator would suffice to send the case to a jury, the knowledge of the fact of disinterment being to be collected from the circumstances, if strong enough to justify the inference. It is stated that there is scarcely a student or teacher of anatomy in England, who, under the law, if truly thus interpreted, is not indictable for a misdemeanor.

According to the opinion of the last-cited witness, to be a party to the non-interment as well as to the disinterment of a dead body, would render a person indictable for a misdemeanor. Two cases are cited in support of this opinion. In the one, *Rex v. Young*, a non-reported case, but referred to by the court in the case of *Rex v. Lynn*, the master of a workhouse, a surgeon, and another person, were indicted for and convicted of a conspiracy to prevent the burial of a person who had died in the workhouse. In the other, *Rex v. Cundick*, which occurred at the Surrey Spring assizes in the year 1822, the defendant was found guilty on an indictment for a misdemeanor, charging him with not having buried the body of an executed felon entrusted to him by the gaoler of the county for that purpose; but with having sold the body for lucre and gain, and for the purpose of being dissected; and on this trial it was not considered necessary to prove that the body had been sold for lucre or for the purpose of dissection. The witness infers, from the analogy of all these cases, that to treat a dead body as liable to any thing but funeral rites, is an offence *contra bonos mores*, and therefore a misdemeanor.

This state of the law is injurious to students, teachers, and practitioners, in every department of medical and surgical science, and appears to the Committee to be highly prejudicial to the public interests also.

It is the duty of the student to obtain, before entering into practice, the most perfect knowledge, he is able, of his profession; and for that purpose to study thoroughly the structure and functions of the

human body; in which study he can only succeed by frequent and repeated dissection. But his wants cannot adequately be supplied in this country, except at an expense, amounting nearly to a prohibition, which can be afforded only by the most wealthy, and precludes many students from dissecting altogether. From the precariousness or insufficiency of the supply, the dissections and lectures are often suspended for many weeks, during which the pupils are exposed to the danger of acquiring habits of dissipation and indolence; and, from the same causes, that important part of surgical education is usually omitted, which consists in teaching how to perform on the dead body those operations which the student may afterwards be required to practise on the living. But not only does the student find dissection expensive and difficult of attainment; but he cannot practise it, without either committing an infringement of the law himself, or taking advantage of one committed by others. In the former case, he must expose himself to imminent hazard, and in either he may incur severe penalties, and be exposed to public obloquy. The law through the medium of the authorities entrusted with conferring diplomas, and of the boards deputed by them to examine candidates for public service, requires satisfactory proof of proficiency in Anatomical Science, although there are no means of acquiring that proficiency without committing daily offences against the law. The illegality and the difficulties attending the acquisition of the science, dispose the examiners in some cases to relax the strictness of their examination, and induce them, in the case of the Apothecaries' Company, to dispense with dissection altogether; the persons to whom certificates are granted by the examiners of this Company being those who, from their numbers* and extensive practice, ought especially, for the safety of the public, to be well instructed. The annual number of certificates so granted exceeds 400.

The teacher of anatomy, besides the evils which befall him in common with the student, has to suffer others, arising also out of the state of the law, which affect him with peculiar hardship. The obstacles which impede the study of anatomy in this country are such, and the facilities presented to the study in foreign countries are so great, that those English students who are desirous of obtaining a thorough knowledge of the science, desert the schools at home, and repair to those abroad. Their principal resort is to Paris, where 200 English students of anatomy are

now pursuing their course of instruction. Dissection, probably, under these circumstances, would scarcely be followed at home, were it not for the regulations of the College of surgeons, which require the candidates for the diploma of the college to have learned the practice of surgery in a recognized school within the United Kingdom; so that the student, during the period required for learning this practice, in order that he may the sooner become qualified for his profession, employs a part of his time in learning also to dissect. These disadvantages, affecting the teacher, are such, that except in the most frequented schools, attached to the greater hospitals, few have been able to continue teaching with profit, and some private teachers have been compelled to give up their schools. To the evils enumerated it may be added, that it is distressing to men of good education and character to be compelled to resort, for their means of teaching, to a constant infraction of the laws of their country, and to be made dependent, for their professional existence, on the mercenary caprices of the most abandoned class in the community.

But it is not only to the student, while learning the rudiments of the science, and to the teacher, while endeavouring to improve it, that dissection is necessary, and the operation of the law injurious. It is essential also to the practitioner, that during the whole course of his professional career he should dissect, in order to keep up his stock of knowledge, and to practise frequently on the dead subject, lest, by venturing to do so unskilfully on the living, he expose his patients to imminent peril. He is required also, in many important cases, civil and criminal, to guide the judgment of judges and of jurors, and would be rebuked were he to confess, upon any such occasion, that, from having neglected the practice of dissection, he was unable to throw light upon a point at issue in that science which he professed. He is liable in a civil action, to damages for errors in practice, due to professional ignorance; though at the same time he may be visited with penalties as a criminal, for endeavouring to take the only means of obtaining professional knowledge.

Under these circumstances, affecting equally the student, teacher, and practitioner, the committee were not surprised to find that this inquiry excited considerable interest in all parts of the country, and that numerous petitions from all classes of the profession, connected with the science of anatomy, were laid upon the table of the house, uniformly praying for an amendment of the existing law on the subject.

But independently of the bearings of the question on the interests of medical practitioners, and on the health of the community, the system pursued is productive of

* Computed at 10,000 in England and Wales.

great evil, by training up a race of men in habits eminently calculated to debase them, and to prepare them for the commission of violent and daring offences. The number of persons who, in London, regularly live by raising bodies, is stated by the two police officers, examined before the committee, not to exceed ten; but the number of persons, occasionally employed in the same occupation, is stated by the same witnesses to be nearly 200. Nearly the whole of these individuals, as is admitted by the exhumators themselves, who were examined before the committee, are occupied also in thieving, and form the most desperate and abandoned class of the community. If, with a view to favour anatomy, exhumation should be allowed to continue, it appears almost a necessary consequence that thieves also should be tolerated. It should seem useless, however, with a view to suppress exhumation, to endeavour to execute the existing laws with increased severity, or to enact new and more rigorous ones. The effect of interpreting and executing the laws with increasing rigor has been, not to suppress exhumation, but to raise the price of bodies, and to increase the number of exhumators. So long as there is no legalized mode of supplying the dissecting schools, so long the practice of disinterment will continue; but if other measures were devised, which would legalize and ensure a regular, plentiful, and cheap supply, the practice of disinterring bodies, and of receiving them, would of necessity be entirely abandoned.

Before adverting to those new methods for obtaining an adequate supply of subjects which have been suggested by the witnesses who have been examined before the Committee, they will state in what manner, according to the evidence adduced, the schools of anatomy at Paris are provided. They have also inquired into the practice of some other foreign schools, for an account of which they beg to refer to the evidence itself; and they dwell upon the practice of the schools of Paris, because it approaches most nearly to the plan recommended by most of the witnesses for adoption in this country.

The administration of all the hospitals at Paris, since the period of the revolution, has been confided to a public board of management. The rule at the hospitals is, that every patient who dies shall be attended by a priest, and that, after the performance of the usual ceremonies of the Catholic Church, the body shall be removed from the chapel attached to the hospital to the dead room, and there remain for twenty-four hours, if not sooner claimed by the relatives. Bodies may be examined after death, by the medical officers

attached to a hospital, in order to ascertain the cause of death but may not be dissected by them. A body, if claimed by the friends after examination, is sewed up in a clean cloth, before being delivered to them. If not claimed within twenty-four hours after death, after being enveloped in a cloth in a similar manner, it is sent, in the manner hereafter described, to one of the dissecting schools.

There are no private dissecting schools at Paris, but two public ones; that of the *Ecole de la Medicine*, and that adjoining the *Hôpital de la Pitié*. These are supplied exclusively from the different hospitals and from the institutions for maintaining paupers; the supply from certain of these establishments being appropriated to one school, and that from the remaining establishments to the other.

The distribution of subjects to the two schools is confided to a public officer, the *Chéf des travaux Anatomiques*. He causes them to be conveyed from the hospitals at an early hour, in a covered carriage, so constructed as not to attract notice, to a building at the schools set apart for that purpose. They are then distributed by the prosecutors to the students; and after dissection, being again enveloped in cloth, are conveyed to the nearest place of interment.

The students at the *Ecole de la Medicine* consists of young men who have distinguished themselves at a public examination, though the person at the head of the establishment is also allowed to admit pupils to dissect. The school of *La Pitié* is open to students of all nations, who, on entering themselves, may be supplied with as many subjects as they require, at a price varying according to the state in which the body is, from three to twelve francs; priority of choice, however, being given to the *élèves internes* of the different hospitals, and the subjects being delivered to them at a reduced price. English surgeons were here permitted, until lately, to engage private rooms for the purpose of lecturing on anatomy to students of their own nation, and to superintend their labours in the dissecting-room. From the protection and facilities which have thus been afforded to the study of anatomy at Paris, it has become the resort of the medical students of all nations; the practice of exhumation is wholly unknown, and the feelings of the people appear not to be violated.

It is the opinion of almost all the witnesses, that the adoption in this country of a plan similar in most respects to that which prevails in France, would afford a simple and adequate remedy for the existing evils. They recommend that the bodies of those who during life have been maintained at the public charge, and who

die in work-houses, hospitals, and other charitable institutions, should, if not claimed by next of kin within a certain time after death, be given up, under proper regulations, to the anatomist; and some of the witnesses would extend the same rule to the unclaimed bodies of those who die in prisons, penitentiaries, and other places of confinement. In the hospitals which supply subjects to the anatomical schools of France and Italy, religious rites are paid to the dead before giving up the bodies for dissection: in the plan proposed for this country, most of the witnesses recommend that the performance of religious rites should be deferred until after dissection, and they are anxious that the anatomist should be required, under adequate securities, or a system of effective superintendence, to cause to be administered, at his own expense, to the bodies which he dissects, religious solemnities and the usual rites of burial.

The plan proposed has this essential circumstance to recommend it—that provided it were carried into effect, it would yield a supply of subjects that, in London, at least, would be adequate to the wants of the anatomist. The number of anatomical students resorting annually to London, and the number of subjects with which they ought to be supplied, have been already stated. It appears from the returns obtained by the Committee, from 127 of the parishes situate in London, Westminster, and Southwark, or their immediate vicinity, that out of 3744 persons who died in the workhouses of these parishes, in the year 1827, 3103 were buried at the parish expense; and that of these, about 1108 were not attended to their graves by any relations. There are many parishes in and around London, from which, at the time of making this report, returns had not been delivered in; but it may be inferred from those returns which have been procured, that the supply to be obtained, from this source alone, would be many times greater than that now obtained by disinterment; that when added to the supply to be derived from those other sources which have been pointed out, it would be more than commensurate to the wants of the student, and consequently, that the plan, if adopted, as meeting the exigencies of the case, would eventually be the means of suppressing the practice of exhumation.

If it be an object deeply interesting to the feelings of the community, that the remains of friends and relations should rest undisturbed, that object can only be effected by giving up for dissection a certain portion of the whole, in order to preserve the remainder from disturbance.

Exhumation is condemned as seizing its objects indiscriminately—as, in consequence, exciting apprehensions in the minds of the whole community—and as outraging in the highest degree, when discovered, the feelings of relations. If selection then be necessary, what bodies ought to be selected but the bodies of those who have either no known relations whose feelings would be outraged, or such only as, by not claiming the body, would evince indifference on the subject of dissection? It may be argued, perhaps, that the principle of selection, according to the plan proposed, is not just, as it would not effect equally all classes of the public; since the bodies to be chosen would, necessarily, be those of the poor only. To this it may be replied—1st. that even were the force of this objection, to a certain degree, admitted, yet that, to judge fairly of the plan, its inconveniences must be compared with those of the existing system; which system, according to the evidence adduced, is liable in a great measure to the same objection, since the bodies exhumated are principally those of the poor. 2dly. that the evils of this, or any other plan to be proposed on this subject, must be judged of by the distress that it would occasion to the feelings of surviving relations, and the unfairness to one or another class of the community, by the degree of distress inflicted on one class rather than another; but where there are no relations to suffer distress, there can be no inequality of suffering, and, consequently, no unfairness shewn to one class more than another.

One or two of the witnesses, who appear to be either favorable, or not opposed to the principle of the plan, speak with doubt of its success, as though it would be found impracticable to reconcile the public to its introduction; and one in particular apprehends that religious feeling may impede its adoption. An objection founded on religious feelings does not apply to the plan in question only but would be equally valid, generally, against all dissection whatsoever; and should lead those who urge it, consistently with their own principles, to endeavour to put down altogether the study of practical anatomy.

Though it may be true that the public are to a certain degree averse to dissection, yet it is satisfactory to find several of the witnesses adducing facts to prove that those feelings of aversion are on the decline. They state that in those parish infirmaries where the bodies of those who die are examined, as the practice has become common, it has been viewed with less jealousy: that in those hospitals where a similar rule prevails, neither patients themselves are deterred from apply-

ing for admission, nor their relatives on their behalf; that the addition of public dissecting-rooms to hospitals has not produced any diminution in the number of applications for relief within the walls of those hospitals; and that, by reasoning with the friends of those who die, and by explaining to them how important it is to the art of healing that examination should take place after death, they may usually be brought to consent to the bodies of their friends being examined. Hence it is argued, that in involving the subject of dissection in mystery, as has hitherto been the case, the public have been treated injudiciously; that with proper precautions, and the light of public discussion to guide them, they may be made to perceive the importance of the study generally, and the reasonableness of the particular measure now contemplated, and that when they come to regard it as the means of suppressing exhumation, they will receive it with favour, and finally acquiesce in it.

The legislative measure which most of the witnesses are desirous of, in order to enable them to carry the plan into effect, is the repeal of any existing law, which would subject to penalties those who might be concerned in carrying the proposed plan into execution: they wish for an enactment, permissive and not mandatory, declaring that it shall not be deemed illegal for the governors of workhouses, &c. and for anatomists, the former to dispose of, the latter to receive and to dissect the bodies of those dying in such workhouses, &c.; such bodies not having been claimed within a time to be specified, by any immediate relations, and due provision being made for the invariable performance of funeral rites. Some few of the witnesses, indeed, who state that they wish for the success of the plan, contemplate any legislative interference whatever in this matter with apprehension; but they do not appear to have been aware how nearly the cases decided by the courts of law, and already adverted to, would apply to persons engaged in executing the plan in question. In those cases, the bodies for the non-burying of which the defendants were severally convicted, were those of a pauper who died in a workhouse, and of a person who had suffered death as a felon. If these cases apply, as it appears they do, to persons engaged in giving up or in receiving, for other purposes than for burial, the bodies of the inmates of workhouses or of prisons, such impediments to the success of the plan cannot be removed, as these witnesses think they might be, simply by the favourable interference of the executive government, however disposed to show indulgence

to the profession; but an act of the legislature can alone provide a remedy.

Amongst the measures that have been suggested for lessening the dislike of the public to dissection, is that of repealing the clause of the act of Geo. II. which directs that the bodies of murderers shall be given up to be anatomised. It appears from the returns already laid before the house, that, as regards the direct operation of this clause, on the supply of subjects, the number which it yields to the anatomist is so small in comparison of his total wants, that the inconvenience which he would sustain from its repeal would be wholly unimportant. As to its remote operation, almost the whole of the witnesses examined before the committee, and of those whose written communications will be found in the appendix, are of opinion that the clause in question, by attaching to dissection the mark of ignominy, increases the dislike of the public to anatomy, and they therefore are desirous that the clause should be repealed.

The committee would be very unwilling to interfere with any penal enactment which might have, or seem to have, a tendency to prevent the commission of atrocious crimes; but as it may be reasonably doubted whether the dread of dissection can be reckoned amongst the obstacles to the perpetration of such crimes, and as it is manifest that the clause in question must create a strong and mischievous prejudice against the practice of anatomy, the committee think themselves justified in concluding, that more evil than good results from its continuance.

The committee consider that they would imperfectly discharge their duties if they did not state their conviction of the importance to the public interests of the subject of their inquiries. As the members of the profession are well educated, so is their ability increased to remove or alleviate human suffering. As the science of anatomy has improved, many operations formerly thought necessary have been altogether dispensed with; most of those retained have been rendered more simple, and many new ones have been performed, to the saving of the lives of patients, which were formerly thought impossible. To neglect the practice of dissection would lead to the greatest aggravation of human misery; since anatomy, if not learned by that practice, must be learned by mangling the living. Though all classes are deeply interested in affording protection to the study of anatomy, yet the poor and middle classes are the most so; they will be the most benefited by promoting it, and the principal sufferers by discouraging it. The rich, when they require

professional assistance, can afford to employ those who have acquired the reputation of practising successfully. It is on the poor that the inexperienced commence their practice, and it is to the poor that the practice of the lower order of practitioners is confined. It is, therefore, for the interest of the poor especially, that professional education should be rendered cheap and of easy attainment; that the lowest order of practitioners, (which is the most numerous,) and the students on their first entry into practice, may be found well instructed in the duties of their profession.

Such, on an attentive consideration of the evidence adduced, is the deliberate judgment of the committee on the matters submitted to them; and it now remains for the house to consider whether it will not be expedient to introduce in the course of the ensuing session, some legislative measure which may give effect to the recommendations contained in the present report.

July 22, 1828.

REMARKS.

In comparing the foregoing report of the committee with the immense mass of evidence from which it has been compiled, we were struck with one important defect—if not an actual dereliction of duty, on the part of the committee. Among the numerous personages which were *summoned* to afford information on the subject of inquiry—or who *volunteered* their services—there were characters from high and from low situations in life—dissection-men and resur-rection-men—sergeant-surgeons to his Britannic Majesty—and (so it is said) DISSECTING-SURGEONS to his SATANNIC MAJESTY. Be the latter true or false, there presented himself before the committee a dissector of great experience, whose evidence occupies some quarto pages of the original minutes. This deponent threw a *new light* upon the grave subject—and traced, with great ingenuity and truth, the evil to its primary source. He proved to a demonstration, that the difficulties attendant on the prosecution of anatomy—in other words, the *scarcity of subjects*, was solely owing to the CHARTER OF THE COLLEGE OF SURGEONS! The cause being discovered, the remedy became obvious. It was “CITO TUTE, AC JUCUNDE.” The Parliament had only to blow up the Temple of Esculapius in Lincoln’s-Inn-Fields, with all the “BATS AND CORRUPTIONISTS,” thereunto belonging, and every anatomist in town and country would in-

stantly be surrounded by shoals of dead bodies, as was the heroic Grecian by shoals of ghosts, when he descended into the regions of Tartarus. The dissector-general not only exposed the evil and proposed the remedy; but he volunteered to *execute* the latter—viz. to *set fire* to the faggots, and make an “AUTO DA FE” of the whole council, not even excepting Mr. LAWRENCE!*

Now considering that the subject of inquiry was EXHUMATION—that the above important information was tendered by a no less respectable personage than the dissector-general of his Subterranean Majesty—that the evil was rendered clear, and the remedy easy—then we say that the committee has insulted the dead, and injured the living, by passing over, in total silence, the valuable suggestions and disinterested offers of the DISSECTOR aforesaid. Not a single allusion is made in the report to a body of parole evidence occupying whole quarto pages of the minutes! Can the committee have leagued themselves with the “Bats and Corruptionists” of the College? This cannot be; since the Dissector lauded them to the skies during the time they were sitting. In short, this conduct of the committee gives us reason to fear that there is a general conspiracy among all the upper classes of society, professional and non-professional, to drown the voice of truth, honour, and impartiality, in the personage whose cause we are here advocating.

73. COLLEGE OF SURGEONS—MR. LAWRENCE.

We have little leisure, and less inclination for MEDICAL POLITICS—especially where the concerns are more of a personal than a public nature. The election of Mr. Lawrence, however, into the council of the College of Surgeons, and his acceptance of office, are events which could have been little anticipated two years ago, and which are calculated to excite various reflections

* We are happy to see that Mr. L. has become a BENEDICT as well as a COLLEGE COUNCILMAN. He will now be useful to the State in various ways, and we wish him success in both capacities.

in the most astute minds. We should not hold ourselves excusable if we indulged in retrospective observations calculated to harrow up any unpleasant reminiscences in the breasts of Mr. Lawrence or of the members of the College council. No man who has the interest of his profession, or the dignity of its members at heart, would wish to do so at the present time. When a man changes his party, his tenets, or his professions, he lays himself open to the charge of inconsistency—and sometimes to more serious insinuations; but, for our own parts, we see no just cause for censure in such cases, unless the *motives* which prompt to the change of sentiment, be proved to be **CORRUPT**. **MUTABILITY** is one of the most distinguishing characters of the human mind, and where is the man who has resolutely clung to the same opinions through life?

Manners with fortunes, tempers turn with climes,
Tenets with books, and principles with times:

Is a man culpable for relinquishing an error which he had imbibed—for embracing a tenet which he had doubted—for withdrawing from a party which he did not approve? By no means. Finally, is it culpable or laudable to forget and forgive animosities—to sail down the stream of life (rough enough of itself) at peace with our fellow-travellers—to foster the kinder passions of our nature, and repress the malevolent—to cherish unanimity in a liberal profession, and discountenance the promoters of feuds and dissensions? * These questions can only be answered in one way. We conceive that the College showed its wisdom as well as its liberality in the election of Mr. Lawrence—and we think that Mr. Lawrence acts an honorable part in sacrificing all personal considerations for the sake of healing wounds under which the profession has long smarted. We have good reasons to know that Mr. Lawrence

has been the unwilling—perhaps even the unconscious instrument by which much mischief has been perpetrated during the last two years. His *temporary* association with a man, whose writings have sunk the medical character of this country in the eyes of all Europe, before the mask was torn away, has been dexterously converted into an implied alliance with the arch calumniator ever since! Hence the satirical abuse of a *fiery* demagogue was too generally considered to be approved by a man whose professional talent and moral character lent to that abuse the only passport which could have circulated it among respectable society. All this was a dark imposition, a cunning device of the enemy of harmony in the profession. No event could more effectually dispel the last fleeting clouds of that moral tempest which has so long been carrying on its work of devastation, than this junction of Mr. Lawrence with the councils of the College. There will be no pretext now for associating his name with the defamatory harangues of the “*moral incendiary*.” The Freemason’s Tavern will no more ring the tocsin of medical revolution. The torch of discord is burnt to the very end—and the lurid glimmerings which it emits, serves only to shadow forth the bloody arm of a public executioner:—we do not mean the executioner at Newgate, who strangles the victim of offended justice—but the **LITERARY ASSASSIN** who stabs the character of all indiscriminately who come in his way, and who happen to be in a degree elevated above himself! * It is to be hoped that now the liberal part of the council has got the ascendancy, they will endeavour to promote the dignity and utility of the surgical profession, by the promulgation of wise laws and salutary regulations, so as to deprive the enemies of order of all handle for vituperation and abuse. We are not so unjust as to attribute all the evils that exist in medical society to the mal-administration of the three corporate bodies—nor so Utopian as to expect that their edicts alone

* We have the very best means of knowing that no man was ever more sick or ashamed of the company into which he inadvertently dropped, than Mr. Lawrence—and that no man is more anxious to put an end to the disgraceful scenes of vituperation which have so long been held up to the disgusted view of every respectable member of the profession.

* It looks somewhat strange that two numbers of the *Lancet* should be published, after Mr. Lawrence’s election, without the slightest notice being taken of that event. Previously to this epoch, Mr. Lawrence could scarcely sneeze without its being gazetted in the *Lancet*! How is this silence to be accounted for?

can purify the profession. The evils lie deep in the human heart—and few of them can be reached by human laws! Envy, hatred, uncharitableness, have been too long the order of the day, and these do more to injure the members of our Profession in the eyes of the public at large, than fifty colleges or corporations, however viciously constructed.*

74. FORMATION OF AN HERBARIUM.

We recommend the specimens to be dried

* It was but the other day that a young man was prosecuted at Bristol, in consequence of phlebitis succeeding venesection. It was sworn in evidence that, the first remark he made, on baring the patient's arm, conveyed a direct reflection on the *unskilfulness* of those who had bled the patient previously! This accusation too was pronounced merely from looking at the scars! The accident which followed the venesection appears almost as a judgment on the illiberal and unprofessional conduct of the youngster. We say unprofessional;—the proper word would perhaps be—*professional*! The rising generation are systematically taught to traduce their superiors—and the more falsehoods they use, the greater is the indication of their talent. This recent substitution of defamation for ethics, is a source of much greater calamity to the profession than all the abuses of all the institutions in the empire. The LATTER may occasion injustice in the case of a few individuals—the FORMER strikes at the very fountain of honour, honesty, and virtue, by corrupting the heart and rending asunder every social tie by which medical society ought to be held together. It is a pity that a Court of Honour is not established in the medical profession, to which its members might appeal in cases that are incognizable by the laws. There is no profession in which so much mischief may be done, by means which the law cannot possibly notice, as in the medical.

between leaves of paper, under the pressure of a bag of sand or small shot, and, when perfectly dry, transferred to a bound specimen-book, and sewed (not gummed) to its leaves, in the order of gathering the specimens. The name should be attached to each specimen by a slip of paper. In the course of three or four years, two or three thousand specimens will have been dried, and these may then be transferred to another book or books, arranged according to the natural system, gummed on, and their names, &c. written beside them. The mode of forming the book for this purpose is as follows.—Suppose the size to be folio; then gum the specimens on one side of leaves of drawing cartridge-paper, paste a leaf of reddish-brown blotting-paper on the back of the leaf containing the specimens, and paste a margin of cartridge-paper all round both sides of each leaf, say half an inch broad at top and bottom, and the outer edge, and one inch broad at the inner or binding edge. This being done, put each leaf separately in a press, and let it remain there till it is pressed quite flat. Proceed in the same way with as many separate leaves as will contain all the specimens to be arranged, or as many as will make a proper sized volume; and then send them to a binder, to be bound in the usual way. The effect of the double edge will be, that each page of specimens will, as it were, lie fastened to the bottom of a shallow drawer, completely excluded from the air; and the volume may be kept in a book-case along with others, in the usual way, and, by its index, referred to with as much ease as any other botanical work. This is by far the best method of keeping specimens that we know of, for small collections; and we would strongly recommend all those who can afford it, to employ Professor La Gasca (*Gard. Mag.* Vol. II. p. 220) to form books of this sort, containing one or two species under each order and tribe of the natural system. There could not be purchased a work of equal value to the young botanist. Mr. Toward, flower-gardener to the Duchess of Gloucester, is the only person that we know of who possesses an herbarium done up in this way, and to him belongs the merit of the invention. The binder was Mr. Perryman, of Windsor, himself much attached to botany. (*Gard. Mag.* August.)

HOSPITAL PRACTICE.

75. HOTEL DIEU.

I. SEVERE BURN FOLLOWED BY TETANUS.

There are not two diseases in all the black catalogue of human ills, more dreadful to endure, more horrible to witness, and we may add, more difficult to cure, than tetanus and hydrophobia. It is a singular fact in therapeutics, that the number of remedies for a given disease, is always in proportion to its *irremediability*. There is only one nostrum for the itch, because any one can cure it by brimstone, whilst innumerable specifics exist for hydrophobia, because it is curable by nobody! It would require even more than the "*ora centum, ferrea vox*" to enumerate the various modes of treatment in tetanus, many of which have been successful in the hands of their *proposers*, few or none in the trials of others. Cold affusion, warm affusion, mercury, bleeding, and laudanum, each and all, like the creeds of other times, have had their day, but speedily sunk into night—*ad orcum sunt demissi*! It is scarcely a twelve-month ago, since a letter was received from a surgeon in the navy, by one of the most eminent men in the profession, recommending the employment of sulphur held in the hand of the patient, as almost a specific for tetanus, and detailing some cases in which it had perfectly succeeded! It happened that the gentleman to whom the letter was addressed had a patient with tetanus in the hospital at the time, and determined to put the *specific* to the test. We need scarcely say that it did not a particle of good.

The only hope we possess, and, alas! it is a feeble one, of arriving at a rational treatment of tetanus, is by carefully studying its pathology. In very many cases there is nothing which the eye of the anatomist can at present detect as disease; but in others, congestion and inflammation are observed in the membranes investing the spinal marrow, and even in the medulla itself. In some cases, indeed, the disease would appear to be *spinitis*, or, it may be, to end in it. In the present imperfect and unsatisfactory state of our knowledge on the subject, the only

thing that can be done is to place upon record the facts that occur, more as beacons to show what has *not* been of use, than examples to indicate what *has*.

Jean Baptise Roger, ætatis 23, a journeyman, was received into the Hôtel Dieu, on the 11th of March, on account of an extensive burn, received whilst intoxicated, by his clothes having caught fire. The burn extended from the posterior part of the body, over the thighs, to the ham; the skin, for the most part, was converted into a hard, black eschar, around which was a zone where the integuments were not so much destroyed; the pulse was pretty strong; but the surface was cold. A bleeding was employed and emollient poultices applied upon the burn, but on the 13th, the reaction was considerable. *Bath—anodynes—poultices, with laudanum.*

On the 15th, the slough was beginning to be detached, and granulations were noticed springing up. The parts in the neighbourhood were the seat of inflammation, and the pain was extremely severe. On the 19th the patient complained of some pain in the head, which was greatly increased on the 20th. On this day there was noticed a difficulty in the motions of the neck, and stiffness in the right arm, together with a slight degree of trismus. The belly was painful upon pressure—the surface was hot—the pulse hard and frequent. The treatment consisted in a bleeding from the arm, leeches behind the ears, and an anodyne with laudanum in the evening, whilst the greatest precaution was observed in protecting the wound from the influence of the air. On the next day, the trismus was increased, and the muscles of the left arm and neck were affected; the face was bathed in sweat; the pulse very sharp. *Bleeding to syncope—bath for three hours—laudanum both by the mouth and in an enema—anodyne fomentations to the masseters and muscles of the neck.* On the 22d, opisthotonos was established, and on the 23d, the jaws were firmly locked. The supuration from the wound had diminished—the granulations had a scarlet hue, the pain was excessive, the pulse became feeble, the surface was covered with a cold

clammy sweat, and the patient expired at seven in the evening of the 23d. The anodyne fomentations, &c. were continued on the last two days, and leeches applied to the back of the neck.

Dissection 36 hours after death. Those muscles of the body which had *not* been affected with tetanus, were firmly contracted, whilst those on the contrary which *had*, were completely relaxed. The whole body smelt strongly of laudanum. The pia mater was injected, and its veins much congested; the tunica arachnoides was opaque, and both membranes were with difficulty detached from the cortical substance of the brain, which was uniformly red and injected. The medullary substance near the surface was also extremely vascular, but as the ventricles were approached, the vascularity decreased, and indeed disappeared. The ventricles contained a very small quantity of serum; the corpora striata, and thalami nervorum opticorum had a number of blood-vessels ramifying on their surface, but were comparatively free from vascularity in their centre, and lastly the brain altogether was firmer than natural.

On opening the vertebral canal, the veins of the theca were found to be gorged with blood; the medulla itself was of natural consistence, but the grey matter in its centre was uniformly and remarkably rosy and injected, especially a little below the cervical portion, and again at the 8th or 9th vertebra of the back.

The great end of the stomach was a little reddened, and the same appearance was observed in the ileum and parts of the colon.

In a case of the disease which occurred very lately at St. George's Hospital, the sulphate of quinine was given for the sake of experiment. We shall mention the heads of the case.

II. WOUND IN THE SOLE OF THE FOOT, SUCCEEDED BY TETANUS—CURIOUS CONDITION OF THE INTERNAL PLANTAR NERVE.

A healthy-looking lad of fifteen, was climbing over the iron railings in the Park, when unluckily he slipped, and the spike pierced the sole of his right foot. This was on the 14th of July, and he felt for a day or two some pain in the foot

and the calf of the leg, but it gradually subsided. On the 21st, he got wet and remained for some time without changing his clothes; on the morning of the 25th, he went out with his brother, but complained of some cramps in his belly and chest, which "were drawn into lumps," and was shortly obliged to return to the house. There was stiffness of the jaw, and there seems at this time to have been a degree of emprosthotonos. Towards the close of the day the symptoms grew severe, the jaw became locked in the night, which was spent in pain and misery, and on the morning of the 16th, the muscles of the back were affected. The wound, as has been mentioned, had been painful for a day or two, but under the use of a poultice a little suppuration took place, and it gave him no more inconvenience.

When brought to the hospital on the 16th, at 11, A. M. opisthotonos was completely established, the body being supported, when supine, on the shoulders and the heels—the jaw was nearly closed—the spasms very frequent and violent—the face bathed in sweat—the pulse full and quick.

Mr. Brodie arrived in the course of an hour, and ordered the patient to be placed on a bedstead in the yard, and buckets of cold water to be emptied upon him. The affusion appearing to have rather an injurious effect, was given up, and the boy carried back to the ward. Towards the middle of the day he was placed in the cold bath at his own request, and experienced a trifling relief. The case being hopeless, Mr. Brodie determined on making an experiment with the sulphate of quinine, which was given at five in the afternoon, to the amount of 5 grains, and exhibited every hour in three-grain doses, as well as the difficulty of swallowing would allow; * at 7 P. M. the cold bath was repeated, and at 8, he took a drop of the hydrocyanic acid, with directions to repeat it every third hour. He had taken three drops, and at six in the morning of the 17th, was offered the fourth, but was totally unable to swallow it. The symptoms had been hitherto gradually increasing in severity, unchecked in the slightest degree by the means that were

* He took 59 grains in all.

employed, but now they assumed a peculiar and ominous character. The paroxysms of spasm were no longer confined to the voluntary muscles, but seized upon the diaphragm, the muscles of the larynx, and the heart. When the periodical convulsion came on, he turned livid in the face, gave a long spasmodic gasp, like an animal that is strangled, the heart beat with violence for an instant, fluttered, and was still—the pulse grew weaker and weaker, and in one of these attacks, he expired at 11, A. M.

Before we proceed to the dissection, we may mention the appearance and condition of the wound. It was situated on the inside of the sole of the foot, apparently in the direction of the internal plantar nerve. On the patient's admission, it was very nearly healed, presented no unhealthy appearance whatever, and the parts in its vicinity for about the dimension of a sixpence, were hardened and agglutinated together.

Sectio cadaveris. The membranes of the brain were injected, and the brain altogether decidedly more vascular than it should be; there was, also, more serum than usual in the ventricles. The spine was laid open from occiput to sacrum, and, on lifting the series of vertebral arches, a peculiar appearance was noticed on the outside of the theca. A transparent sort of substance, looking like very fine adeps, or cellular membrane injected with serum, was collected in considerable quantity. It had not the appearance of lymph, and appeared to be a natural formation.

The principal interest attached to the examination of the wound. The posterior tibial nerve in the leg, was found to be perfectly healthy, but on tracing that branch of its plantar division that goes to supply the great toe, it was found to be involved in the wound. The spike had not actually penetrated the nerve, but passed by the side of it, and probably grazed it, so that it lay in the centre of the lymph and induration produced by the injury.

In his clinical lecture, Mr. Brodie alluded to a similar case that occurred to the late Mr. Ewbank. A man who had been stabbed with a pitchfork in the leg, became affected with tetanus, and died. On dissection, the fork was discovered to have penetrated to the peroneal nerve, which appeared to have been bruised,

and was involved, as in this case, in the inflammation excited in the wound. In cases like these, it would not be unreasonable to propose the excision of the cicatrix, because if unattended with good, it could scarcely be followed by harm, and would be to the surgeon what straws are to men that are drowning—bad support certainly, but probably the best they can get. That tetanus (traumatic) will follow other injuries than those of the nerves, at least the larger ones, we are aware, indeed the case at the head of this article, where the cause was a burn, is sufficient to settle the question. At the same time, it is known, that an injury of a part which is largely supplied with the branches of nerves will, *cæteris paribus*, be infinitely more liable to be followed by tetanus, than the wound of a part which is not so supplied. Hence, we account for the comparative frequency of the disease after injuries of the hand, or the sole of the foot, where the nerves are both numerous and large. Those anomalous symptoms which so frequently follow the lesion of a nerve, would seem to be similar in *kind*, though widely remote in *degree*, from the horrible spasm in tetanus, which seems to affect every muscle in the frame. The case of the medical gentleman, which we published, is a melancholy instance of this very distressing affection, and another of a similar description was detailed by Mr. Bell, in his lectures, we believe, at the College.

A man, while at work on the side of a vessel in dock, slipped from the platform and fell, but was caught in his descent, and hung suspended by the ham from a boat which was slung to the ship. Contusion and inflammation of the part were the consequence, but these, in a little while, subsided. The immediate effects of the injury being over, there slowly and gradually came on the most excruciating pain in the sole of the foot, so unbearable at times, that the poor man would frequently rise from his bed to plunge the leg in the hottest water, and suddenly remove it to the hearth-stone, or place it in ice, if he could get it. He went to a hospital, where he took a course of mercury, but experienced no relief, and was dismissed. The pains becoming worse, he was re-admitted, but only to be treated with the same ill success. He gradually sank under the influence of pain, and it

was only a few days previous to his death that the patient was seen by Mr. Bell. On examination, Mr. B. found a little knotty tumour in the ham, which was exquisitely painful on pressure, and appeared to be seated in the course of the nerve. It was too late to perform an operation, or else it was proposed, if the state of the patient had allowed it, to cut across the nerve. On dissection, the nerve (we think the posterior tibial) was found to be expanded in the ham into a sort of ganglionic knot, which embraced and divided its filaments, and had caused all the sufferings in the sole of the foot.

This case has a certain analogy with those which preceded, and we know of no reason why the spasms of tetanus should not be as likely to depend on a lesion of a nerve, as all these anomalous and generally indomitable symptoms. In a case which is mentioned in Sir Astley Cooper's Lectures, "the whole sciatic nerve was included in a ligature, which was applied to suppress hæmorrhage from the artery which accompanies the nerve. In four days, the man was seized with violent spasm in the stump. On the fifth day, spasms affected the limb, and from thence extended to the other muscles of the body. On the seventh day, he died."

If the above was not allied to tetanus, or tetanus itself, we are very much mistaken. Mr. Brodie, in alluding to excision of the wound, made a very important remark. Allowing, said Mr. B., that the general spasms are the consequences of the local affection, still there is neither probability nor analogy in favour of the notion, that the former will subside if the latter is removed. The wound is the cause, it is true; but, when once the constitution is affected, this affection becomes independent of its cause, and will not be removed by its removal. Look, then, which way we will, we see but how little we know of the laws of the nervous system, either in health or disease. Whether the progress of knowledge and "march of mind," will further discover our weakness, or augment our strength, if strength it can be called, is a problem which we leave for those to solve who can.

76., ST. BARTHOLOMEW'S HOSPITAL.

VARICOSE VEINS.

We had thought that the minds of the profession in this country were pretty well made up against tying or cutting out portions of varicose veins. Sir Astley Cooper, whose experience, of course, has been great, has publicly abandoned the operation, or rather operations, and the example, we know, has been followed by surgeons of very great eminence. A man may go on with success for a time, but at last the day of reckoning arrives, and the loss of his patient convinces him, alas! when too late, of the dangers and disasters attending the practice.

One of these "warnings," has lately occurred at St. Bartholomew's Hospital, and we give the particulars that those persons may profit by it who are able or willing to profit by any thing, for the obstinate routinist is neither.

Case. J. D. ætatis 35, received, when a boy, a scald on the inside of the leg, where there formed, in after years, a varicose vein, and an ulcer below the internal malleolus. The occasional bursting of the vein, and pain and inconvenience of an ulcer, preventing him from following his business as a servant, he entered Bartholomew's Hospital on the 26th of May. His habit of body was bilious and irritable—his bowels were costive—his pulse rather quick, but variable and full. The treatment, in the first instance, consisted in the application of poultices and leeches, attention to the diet, and rest in bed. In the course of a fortnight, strapping was employed, but discontinued at the end of a week, having only been productive of pain and inconvenience. Emollients were therefore resumed, no amendment took place, and, on the 25th of June, "the vein was exposed about the middle of the leg, and a third of an inch was removed with a very slight hæmorrhage." He bore the operation very ill, and immediately afterwards complained of a sense of oppression and sinking at his chest. Twenty drops of laudanum were given, the limb kept continually wetted with cold lotion, and the bowels not having been opened in the day, he took three grains of calomel, combined with ten of jalap.

On the following morning, the bowels were unopened, there was nausea and

vomiting of greenish-coloured matter, and the absorbents of the thigh were swollen, reddened, and painful to the touch. The calomel and jalap were repeated, with a rhubarb draught, as salines produced sickness, and the addition at 2 P. M. of twenty leeches to the thigh, and two grains of blue pill, with half a grain of tartarized antimony. The bowels were relieved, and the pain of the limb was diminished, but the symptoms on the 27th indicated plainly a high degree of inflammation of the veins and absorbents. The dressings were removed, when the wound was found open, and its edges inflamed. Thirty-six leeches to the thigh—salines with antimony. V. S. ad 3xx.—acid drinks—poultice—low diet.

The pulse before the bleeding was 120, but afterwards rose to 135 or 140. The patient passed a restless night, and the 28th found the leg and foot erysipelatous and swollen—epigastrium painful—sickness and malaise. To these symptoms there was added, what is always to be looked on as formidable in cases of phlebitis, a difficulty of breathing. The leeches were repeated with blue pill and opium, and the next day exhibited a pause in the severity of the symptoms. On the 30th, the first of a series of curious phenomena appeared, viz. the left arm was attacked with a phlegmonous inflammation. Lotion was applied, but the dyspnœa and malaise were so much increased in the night, that the house-surgeon ordered ten grains of the pulvis Doveri.

July 1st. The inflammation and swelling in the leg have subsided, but continue in the arm, and have also appeared in the opposite leg, or, we should say, increased, for they appeared the day before. The pulse is improved, but still he complains of dyspnœa and pain in epigastrium. *Pulv. ip. comp. grs. v. ter die.* The leech-bites now ulcerated, and hæmorrhage took place from one of them to nearly a pint. Pain and tension were complained of in the head, depression of the powers supervened, and those peculiar symptoms of inflammation of the veins which all who have seen will readily recognize, carried off the patient in the evening of the 4th.

The cornea of both eyes, on the 3d, became opaque, the vessels of the tunica conjunctiva were loaded, the patient lost his sight, and was unable to open his

eyes without a considerable effort. On the afternoon of the 3d, it was suggested that mercury had been useful "in cases attended with similar typhoid symptoms." The patient was accordingly ordered two grains of the submuriate and half a grain of opium every fourth hour. The effect, we need scarcely say, was—none: indeed the person or the drug that could do any good in the last stage (the typhoid) of phlebitis, would be worth ten times more than the fine of the judges in Athens, their own weight in gold, to the Patron of Physic, the Pythian Apollo!

Dissection. The vein which was a branch of the saphena minor was inflamed in the whole of its extent to the ham, where the inflammatory appearances ended abruptly. The vessel was filled with lymph and pus, several of its muscular branches were also filled with pus, and the inflammation extended for three quarters of an inch below the point where the operation was performed. Deep-seated abscesses had formed beneath the fascia of the left leg and forearm, separating to a considerable extent the fibres of the muscles; in the right forearm also a good deal of sero-purulent effusion was found in the same situation. There was nothing observed in the abdomen, but an abscess was discovered in the upper part of the lung on the right side, that was evidently the product of recent inflammation. There was a good deal of effusion into the cellular tissue of the pia mater, particularly towards the basis, "and the serum in the veins (qy. ventricles?) was of a deep yellow colour. Lymph was effused around the trunk of the carotids, the 3d nerve on the left side was evidently flattened and softer than its fellow, and the 5th on the right side had undergone a similar change to a greater extent. The cornea of both eyes were rough and opaque, the crystalline of the right so softened as to yield to the slightest touch, the vitreous humour of a reddish yellow colour, and injected with red vessels, and the retina deeply reddened also.—*Gazette.*

We do not see at all why simple division of the vein with a valvular opening in the skin should not have been resorted to. We never saw an instance where this operation was followed by any bad effects, though of course their occurrence is by no means impossible. Nothing can be more unattended with danger, in ge-

neral, than phlebotomy, and yet it is occasionally followed by fatal inflammation, a circumstance which should put us on our guard against blindly confiding in the absolute safety of any operation on the veins. Our only alternative in evils like these is merely to choose the least, and we think there can be but one opinion as to which is most likely to cause inflammation—division, or excision of a varicose vein.

So much for the operation, but a word or two remains to be said on the points of the case. In the first place we may remark that the patient was of an anxious, irritable habit, had been a servant, and probably led an intolent luxurious life, all of these circumstances exceedingly likely to favour the development of unhealthy inflammation. The different abscesses which were formed in each of both the lower and upper extremities, and in the lung, are exceedingly curious phenomena, though generally occurring in phlebitis in a greater or lesser degree. The case which is detailed by Mr. Lawrence in the sequel to Mr. Rose's paper in the *Medico-Chirurgical Transactions* is very analogous to the present, though the various formations of matter in that were a consequence of the operation of lithotomy. To us it appears that these purulent depôts in so many and various situations are very strong arguments in favour of those who conceive that a general vitiation of the fluids takes place; at any rate, we know of no other explanation, that has any pretence to feasibility. The changes which occurred in the eyes are difficult to account for. The reporter of the case puts the question—"Were they connected with the alteration which had taken place in the structure of the third and fifth pair of nerves?" The thing is more easily asked than answered.

77. LA CHARITE.

STRANGULATED FEMORAL HERNIA. SLOUGHING OF THE INTESTINE—DEATH.

A woman of seventy had been affected for several years with reducible femoral hernia on both sides, that on the right being the oldest and largest. She had long worn a bandage, but having left it

off for some time, the hernia on the left side became irreducible, and vomiting at first of bilious, afterwards of stercoraceous matters, together with costiveness succeeded. On the 16th June, six days after the hernia became irreducible, she entered La Charité, and was placed under the care of M. Roux. The vomiting was continual; the tumour about the size of a large walnut, painful and tender, especially on pressure; the integument which covered it, hot and inflamed. The general symptoms were not so alarming. The abdomen was not very painful, the surface preserved its ordinary temperature, the pulse was pretty strong, and there was none of that cold, clammy sweat, which indicates the sloughing of strangled intestine. The operation, however, was immediately performed. The sac was exposed by a longitudinal incision, and the hernia, which consisted entirely of a small knuckle of intestine, was laid bare. Gimbernat's ligament was divided, when there flowed out a yellowish fluid, evidently fecal. The intestine was, therefore, drawn down to discover its state, and a cut was discovered in it corresponding to the edge of Gimbernat's ligament—The gut was dark brown, and inflamed both above and below the point of strangulation. An incision was made along the whole of its extent, and the feces allowed to escape from the gut which was not fixed in the wound by any artificial means whatever.

The vomiting ceased on the completion of the operation, and, on the 17th, the abdomen, though a little tympanitic, was not at all tender on pressure. A female catheter was introduced into the upper end of the intestine, and vent given to gas and fecal matter. On the 18th, the flatulence was greater, but the state of the patient on the whole was satisfactory. The good symptoms, however, disappeared next day; the pulse grew weaker, the extremities cold; the belly, though still free from pain, was greatly distended, and the patient expired in the course of the 24th.

Dissection. There were every where marks of acute peritonitis, and adhesions between various folds of intestine, some of them apparently of ancient date. The large intestine was thickened in part of its extent, and its mucous membrane presented a deep brown hue. The portion

of intestine which had formed the hernia had contracted slight adhesions with the walls of the abdomen, in the neighbourhood of the femoral ring. All that part of the intestine above the strangulation was distended with liquid fecal matters and gas; the stomach presented the hour-glass contraction, and contained in its cavity a small quantity of the matters found in the intestine. Gimbernat's ligament, which had been fairly divided by the bistoury, had cut through the intestine like a fine and sharp ligature.

The reporter observes that three cases of a similar description have successively occurred at the Hospital of La Charité. This division of the gut by the stricture of Gimbernat's ligament is infinitely more likely to occur where intestine alone is included in the sac than when it is encircled by yielding omentum.

78. ROYAL INFIRMARY OF EDINBURGH.*

Dr. Ballingall deserves, and we trust will obtain, the approbation of the students of the Royal Infirmary for his clinical instruction and clinical reports. To descend on the merits of publishing reports of the practice of Hospitals, would at present be a work of complete supererogation, and save and except a few bigoted imbeciles, there is scarcely a practitioner from John o'Groat's House to the Lizard's Point, who does not acknowledge their power and value. Dr. Ballingall has furnished a useful and honourable example to his brethren, in recording the cases confided to his care, an example, that is like to be a good deal more praised than pursued. We wish it were possible, but fear it is not, to induce the provincial surgeons and physicians to imitate the plan of Dr. Ballingall, and give to the world the more interesting cases occurring, as they constantly must do, in the county and country hospitals. In London itself, the existence of regular hospital-reporters, prevents the necessity for the medical officers publishing or writing in propria persona.

*Dr. Ballingall's clinical lecture, delivered to the Students of the Royal Infirmary, July, 1823.

Dr. B. begins his lecture by referring to and concluding some cases in his last. These we pass over, and proceed to the case of William Gardener, aged 19, admitted with a lacerated wound of the hand, in consequence of the bursting of a fowling piece.

"The metacarpal bones of the left hand were fractured near their carpal extremities, their heads, with the exception of that of the thumb, were dislocated at their articulation with the bones of the carpus, the anterior row of which was very much exposed and loosened from its connexion with the other; the soft parts on the back, but particularly on the palm of the hand were extensively lacerated—hemorrhage trifling."

The limb was removed a little above the middle of the fore-arm by the flap operation—some inflammation that subsequently occurred in the stump was subdued by a twelve-ounce bleeding from the arm, a purge, and the removal of the straps from the wound—the stump healed kindly—and the lad was discharged on the 27th of May, not quite three weeks from his admission.

Dr. Ballingall remarks that in a case which he saw of the circular operation in the fore-arm, the bellies of the muscles being full below the elbow, the skin, when divided by the first turn of the knife, could not be easily drawn upwards over the subjacent muscles, but formed on them a stricture, like that of the prepuce on the glans in phymosis. We do not consider this a serious objection, as its occurrence must be rare, and the tension of the skin might be readily removed by a trifling incision at the side of the limb. The flap operation in the fore-arm is a neat one, accomplished with ease, and subject on the whole to as few inconveniences as a flap operation can be. It occasionally, however, occurs that the tendons, "from the resistance they give to the knife, are in some measure drawn upwards, and are cut longer and less smoothly than they should be." The remark is a just one, for not only the tendons, but also the arteries and nerves are too often unequally cut. In the flap operation the incision is oblique, the division of the blood-vessels oblique, and hence we believe, it has resulted that the artery being injured above where the ligature was applied, the consequence

has been the occurrence of secondary hæmorrhage. These circumstances of course, do not damn the operation, but merely teach us caution in performing it. Dr. Ballingall thinks that the simple expedient of making an assistant firmly grasp the wrist, will enable us to avoid the unequal division of the tendons.

The next case on the list is that of Alexander Moffat, ætatis 17, admitted on the 20th of May, with two contused wounds on the lower part of the thigh, the ham and the knee. The integuments and fascia were separated from each other all around the knee, and in many parts, the latter membrane was lacerated also. Two similar but slighter contusions existed on the ankle and heel. The injuries were caused by the wheel of a cart very heavily laden, pressing for some minutes against the limb.

"On the morning of the 21st, the wound was observed to be gangrenous, and before the usual hour of visit this gangrene had spread extensively round the knee and down the fore part of the leg; free incisions were made through the black and insensible skin, which gave vent to large quantities of fetid air and dark coloured sanies. The propriety of amputating the limb was now considered in a full consultation, and was declined, in consequence of the advanced state of the disease, the lower part of the thigh being decidedly gangrenous, and the remainder of it so far involved as to be discoloured, swollen, tender, and emphysematous; the wounds on the other leg had also assumed a gangrenous disposition, the patient was affected with subsultus tendinum, his pulse at 120 and fluttering, his tongue furrowed and dry, his skin hot, and thirst urgent. Hot turpentine was poured into the incisions, and the effervescing poultice applied. Opium and wine were administered internally, but without any thing like even a temporary suspension of the symptoms. He soon became delirious, and expired on the evening of the 23d." 8.

As we purpose very shortly devoting an article to some cases of traumatic gangrene, we shall say very little on the subject at present. Our impression on perusing the case, is certainly in opposition to the determination that was come

to by the gentlemen in consultation. The injury was received at the lower part of the thigh and the knee, and the gangrene at the hour of visit on the 21st, had only, we are told, "spread extensively round the knee, and down the fore part of the leg." If the operation is desirable at all in "traumatic gangrene," and Dr. Ballingall is one of those who think that it is, then surely it was needed in a case like the above. There may have been features in the case that induced the consultants to reject the operation, features of which we can possibly know nothing. Judging, however, from the *littera scripta*—the report, we certainly think that the thigh should have been amputated as near the trochanters as the surgeon could go. Whilst we state our own opinion, we think it only fair to let Dr. Ballingall speak for himself.

"Although, for the reasons formerly stated, I declined this operation in Moffat's case, and although the only case in which I have ever operated in such circumstances, terminated fatally, yet I should be sorry to have it thought that I am in any degree hostile to the practice. I think it right to observe, that, in declining an operation in the case now under review, I was in no degree influenced by the unfavourable issue of another case, which I shall immediately proceed to detail. You will recollect that at the time the amputation of Moffat's limb was under consideration, the case I allude to afforded a prospect of a favourable result. In declining the removal of this boy's limb, I was actuated by a conscientious conviction, (right or wrong,) of its inutilty; by a firm persuasion that the performance of an operation in a case so hopeless, would have been more likely to bring a promising practice into disrepute, than to have saved the life of my patient."

The case that is alluded to above was under the care of Mr. Liston, who, it gives us much pleasure to find, is displaying his talents in the walls of the Royal Infirmary.

Robert Brookie, 40 years of age, was admitted, on the 3d of last May, having fallen from a house four stories high. The tibia and fibula were fractured, about an inch and a half above the ankle-joint, the lower portion of bone being forced beneath the upper. The second phalanx

of the thumb was also broken. "The limb was placed on the suspending apparatus."

On the 7th, the bandages were removed from the ankle-joint, in consequence of pain and swelling of the limb. On the 8th, he was rather light-headed, and complained of pain of head. The pulse being full, he was bled to 3xx. when the blood was both buffed and cupped. The skin around the fracture, had a dusky red colour, and presented on the fore part of the leg some vesications—the pulse was 84—tongue loaded—bowels costive.

R. *Tart. potass. et sod.* 3ss. *Supertart. potass.* 3ss. *Tart. antimon. grs.* ij *Aque,* 3xvi. M. *Capt.* 3j. *3tiâ quâq. horâ.*

On the ninth, the whole inside of the leg was discoloured, and a streak had extended up the thigh—there were several black vesications on the ankle—toes cold—much starting of the limb. A bandage was applied from the toes to the thigh,* and a lotion was used to the leg. He passed a bad night, undoing the bandages, and was certainly worse next day. *Infus. catechu thebai,* 3ss. *subinde.* *Haust. s.c.* *Tinct. op. gtt. c.*

On the 11th, the appearance of the leg was much the same, but the fore part of the foot and the toes, were livid and cold. Camphor, in almond emulsion, was given, with beef-tea ad libitum, and, next day, presented the following symptoms.

"Lies in a drowsy state, but frequently starts up in bed. The dusky appearance on inside of thigh, has entirely disappeared, the fore part of foot is more livid and cold; he does not appear to have any feeling in his toes; the discharge from the ankle has a most offensive smell; no stool since yesterday; tongue loaded; much thirst; his breathing appears rather laborious; delirious at times; no pain of head; pulse 100, of good strength; skin hot."

Mr. Liston now removed the limb, above the knee, by the flap operation, when the bones were discovered to be much comminuted, and the fracture extending into the ankle-joint. The cartilages of the latter joint were red, and very putrid matter was found to have bur-

rowed in the calf of the leg. Some hæmorrhage followed the patient's removal to bed; in consequence of which, the stump was undone, and several vessels were secured. We deem it unnecessary to go into the minutiae of all the diurnal details; suffice it to say, that the patient next day was affected with troublesome cough, and, subsequently, pain in the breast. The pulse was about 80, and the bowels confined. On the 15th, bilious vomiting was added to the cough, the skin was cold and clammy, the pulse 55. On the 16th, hiccup supervened; the discharge from the stump was fetid and profuse; the bowels out of order. His nights were very restless—delirium came on—the hiccup was frequent—subsultus appeared on the morning of the 19th. The pain in the breast, on the 23d, was severe on a full inspiration, the cough very troublesome, and he died in the course of the 24th. The discharge from the stump appears to have been great, but latterly was healthier than at first, whilst nothing like a recurrence of the gangrene would seem to have taken place. The treatment consisted at first of camphor mixture; then of the tincture of digitalis and tincture of gentian; and, finally, he was supported by means of spirits—the camphorated tincture of opium—spiritus ammoniæ aromaticus, and camphor in almond emulsion, each being exhibited as the varying symptoms required.

Dissection of the body discovered a fracture of the 4th rib, an inch from the cartilage; a small amount of pus on the outside of the pleura costalis; and old adhesions of the pleuræ to a considerable extent. The left lung was full of those tubercular bodies that are found to be formed after great operations—there were several abscesses in the liver, and a quarter of a pint of bloody serum in the pericardium. A long coagulum existed in the femoral artery.

We agree with Dr. Ballingall, in thinking that the present case proves little in either way—against the operation during gangrene, or for it. We are free to confess, as they phrase it in Parliament, that we do not think the patient would have died one day sooner, had the limb been left on; nor, perhaps, a day later, had it never been touched. The cause of death was neither the operation nor its effects, but the purulent dépôts in the liver and

*We do not see the reason for bandaging; in fact, we question the propriety of the measure.—REV.

the lungs, dependent, in all probability, on the injury originally received. The local affection appears to have been mild, indeed we suspect that it would not of itself have proved fatal, had the viscera been free from disease. It seems to have been rather a form of erysipelatous inflammation than gangrene, or at least that acute and very dangerous variety that is frequently the sequel of a violent injury. We remember to have seen after simple fracture of the tibia, an affection of the leg very similar to this, consisting in numbness, discolouration, and black vesications, when the patient recovered without any operation or slough of more than the integument. In that case, the pulse running high, venesection was employed.

"One symptom, however, appeared early in this patient's case, which I did not fail to remark to my colleagues, and which, as far as my observation goes, is a circumstance almost uniformly foreboding a fatal termination; I allude to a peculiar yellow hue of the skin, which not unfrequently attends the symptomatic fever supervening upon wounds and operations; this has, perhaps, struck me more forcibly from being familiar with a similar appearance in the idiopathic fevers of tropical climates; and, although I have no wish to alarm the citizens of Edinburgh by talking of a yellow fever in this part of the world, yet I am bound to state for your instruction, that I have occasionally seen it here as well marked as I ever saw it at Seringapatam or Batavia, and when supervening upon injuries, much more uniformly fatal.

"A case of this kind occurred some years ago, which made a deep impression on my mind, and which must have done so, I think, upon all those who had occasion to witness it; I allude to that of a seaman belonging to one of His Majesty's ships, in the roads, whose limb had been amputated below the knee in consequence of an accident. The accommodation on board his ship being defective, and the vessel about to sail, he was brought ashore to this hospital, and placed under my care; here his stump sloughed, the symptomatic fever ran high, was attended with that dingy yellowness of the skin to which I allude, and, in a few days, he died. I observed to the surgeon of the ship, who came ashore to see him dissect-

ed, that this case wanted nothing but the 'black vomit' to constitute a complete example of yellow fever; and it was found on laying open the stomach, that this circumstance, necessary to complete the parallel, was hardly wanting; for here was a large collection of that dark grumous fluid resembling coffee grounds, which is so often evacuated from the stomach in tropical fevers."

We are somewhat at a loss to know whether Dr. Ballingall is alluding to a peculiar and uncommon appearance in disease, or one that we have repeatedly witnessed ourselves, and must have been as repeatedly witnessed by others. As far as we have seen, this yellow and bilious suffusion is generally noticed in cases of gangrene and phlebitis, a little before their termination. That at times it exists in other cases, we are very well aware, but we think it will be found a most constant attendant on these two diseases.

The symptom has always been the harbinger of death, the constitution of the fluids appearing to be vitiated, the pulse being fluttering or feeble, the secretions from the wound being greatly perverted, or totally arrested, and the powers of the mind subverted in delirium. Acknowledging, however, as we do, the fatality of the symptom, we cannot, at the same time, erect it into yellow fever with the facility of Dr. Ballingall. We should term it the precursor of death, not the cause; and consider it as marking the deprivation of the fluids, the sequence of disease, rather than disease in itself.

Here we conclude for the present, with the intention of resuming the review of the Report on a future occasion. Before parting company, we beg to express our satisfaction again at the course Dr. Ballingall has taken.

79. LA PITTE.

I. AMPUTATION OF THE NECK OF THE UTERUS.*

As operations on the uterus appear to be growing very fashionable, perhaps it would be useful to give some account of the mode of proceeding adopted by Lisfranc.

* *La Clinique.*

The patient was a woman 49 years of age, and the operation performed on the 4th of July, in the following manner. The neck of the uterus being too much enlarged to allow of its being seized at the bottom of the vagina, it was necessary to draw it down to the orificium externum, in order to determine the limits of the disease. This preparatory step was, however, very difficult, in consequence of the tumour being fungous and softened, whilst there only existed a kind of band above, where the tissue of the organ was so firm as to admit of the necessary traction. This difficulty was surmounted, by M. Lisfranc introducing the fore-finger of the left hand so deeply, that its point passed the limits of the fungus, and then carrying forwards upon it a hook, (*une aigüe*) guarded by lying with its flat side on the finger. Having reached the sound part of the uterus, the hook was turned round and impacted in its substance, by pressure with the end of the finger. Many other hooks were introduced in the same manner, and the diseased mass drawn down, by their means, to the labia externa, when a pair of forceps, (*pince de museux*) was applied, and several of the hooks were withdrawn. The tumour being retained in this position by assistants, the operator proceeded to ascertain the exact limits of the disease, and the point of attachment of the membrane of the vagina, rather by means of the finger than the eye. The labia were then separated as widely as possible, and the band of sound parts cut across by a bistoury with a very concave cutting edge, the section being made from behind towards the front, and care being taken to prevent any obliquity.

These were the principal features of the operation, which we give for the sake of recording the *how*, and not of discussing the *why*. The most difficult and embarrassing part of the proceeding, was getting the tumour to the mouth of the vagina, a difficulty that is sometimes completely insuperable. In a case of polypus uteri at St. George's, under the care of Mr. Brodie, the body was so large, that the efforts to draw it down were ineffectual, and in consequence abandoned. In a case which occurred to M. Dupuytren, the traction was also ineffectual, until the perinæum was divided! In the case of Mr. Brodie's to which we have alluded,

the operation was concluded by throwing a ligature, by means of the double canula, round the neck of the polypus in situ. The ligature was tightened *de die in diem*, and the tumour sloughed off at the end of a week. The operation was accomplished in a very few minutes, occasioned but trifling pain, and produced no subsequent inconvenience whatever.

II. DEATH FROM THE OPERATION OF MAKING A NEW NOSE.

A middle-aged man, of apparently good constitution, contracted the venereal, for which he was an inmate of the Hôpital des Vénériens, and treated by mercurial preparations. The malady was cured, but not before its ravages had entirely deprived him of his nose, in consequence of which he entered La Pitié, to undergo the operation for remodelling that feature on the "human face divine." M. Lisfranc, however, hesitated at first, from a fear that the system was not entirely purged of its syphilitic taint, or, as yet, in a proper condition for ensuring the surgeon's success. As winter came on, the cold was supposed to be injurious; and early in the spring, copper-coloured blotches appeared upon the surface, and delayed the performance of the long-expected operation until the 16th of last July.

The dimensions of the flap upon the forehead were not, as is usual, marked out by ink, but the nitrate of silver, in substance, to prevent their being effaced and washed away by the blood. The rule of not denuding the frontal bone so much as to cause its necrosis was attended to, and the incision on the left side was carried three lines lower than that on the right, in order to allow for the twisting of the flap. The operation being ended, the patient was taken to his bed, and the dressings not applied for an hour, to allow the bleeding from the smaller vessels to be stopped. The lips of the wound on the forehead were then brought together by adhesive straps, and covered with simple dressing, compresses, lint, and circular roller over all. The flap was applied upon lint covered with linen, arranged in the form of a nose, and supplying its place; its borders were connected with the groove by twelve or

thirteen points of suture, and two adhesive straps crossed it transversely, the one at the top and the other at the bottom, surmounted by a piece of simple dressing and a bandage denominated a mask.

For the first few days after the performance of the operation, there was fever and want of sleep at nights. These unfavourable symptoms, however, passed away—the general condition of the patient promised well—and the artificial nose appears to have succeeded, when suddenly a change supervened, which rapidly hurried the patient to his grave. The report on the 28th. left the patient doing well, but he complained next day of a little diarrhoea; the tongue was dry, the abdomen not painful upon pressure. One or two whitish points which had previously appeared on the wound of the forehead, were now become black, but, other than these, no symptoms of importance, or, indeed, any symptoms at all, are recorded. The patient expired at five o'clock that evening.

Sectio Cadaveris 40 hours after death.—The body was by no means meagre, or attenuated. The head and the chest showed no signs of disease, except that in the latter, there were traces of ancient adhesions of the pleuræ. The stomach showed patches of red here and there—the duodenum bore marks of chronic inflammation, its mucous coat being thickened, and apparently puffy. Towards the termination of the small intestines, seven or eight ulcers were discovered, with thickening of the mucous membrane. The large intestine was the seat of acute inflammation—the spleen rather larger than usual—the liver was healthy and natural.—*Clinique.*

There is nothing, we think, in the foregoing dissection, which fairly accounts for the sudden termination, and the symptoms during life are even more ambiguous.

We do not clearly see from the written report, which is certainly not quite so full as it might be, the immediate cause of the patient's disease. The reporter, however, has promised to clear up the mystery hereafter. The case, is very interesting, on several accounts, and calculated to teach those members of the profession who excel in this particular branch of their art, that they cannot always fashion new noses with impunity.

80. GLASGOW ROYAL INFIRMARY.

HOSPITAL DISEASES.

We resume the review of Dr. Anderson's Clinical Report, by extracting some observations on what are termed by the Doctor "hospital diseases." After noticing the paucity of cases of erysipelas, he proceeds to observe—

"There were also fewer of the other hospital diseases, under which term I have been accustomed to include a great variety of inflammatory attacks, both external and internal; affecting sores, and remote from them. Many of the causes of these attacks are involved in considerable obscurity. I am inclined to attribute much to regulation of diet, cleanliness both personal and general, and ventilation. But there is another cause which I must not omit to notice. This is crowding, the direct operation of which, in generating many diseases, not generally attributed to hospital causes, does not in my observation admit of a doubt. This I have noticed amongst the medical patients; but it is still more conspicuous where there are a great number of sores discharging copiously. I have paid some attention to this subject, and I have refused to admit patients who required to be laid on additional beds on the floor. Whenever, also, there was any appearance of hospital disease, I have endeavoured to diminish the numbers as much as possible. The beneficial effects have corresponded very nearly with the practicability of effecting this and other objects connected with this important subject, into which I cannot here enter."

In the common acute erysipelas of the skin, superficial incisions were occasionally used, but the free use of leeches, with lotions, and salts with the tartrate of antimony internally were generally sufficient to check the disease. The erysipelas serpens of debilitated patients, or "travelling erysipelas,"* as Mr. Abernethy calls it, was treated, with success, by a dose or two of calomel and antimony, followed by the sulphate of quina and wine. When this form of erysipelas was circumscribed or confined to a limb, a narrow piece of blistering plaster placed

* Egad! it is a travelling disease.—*Abernethy's Lectures.*

on the surrounding sound skin was often sufficient to stop it.

The practice of blistering in the neighbourhood of erratic erysipelas we have never had an opportunity of witnessing, but local applications have generally so very little power in the disease, that we should not be disposed to place any great faith in the measure. The French apply the blisters on the surface immediately inflamed, a much more objectionable plan.

II. EXOPHTHALMOS—SUCCESSFUL REMOVAL OF THE EYE.

Mrs. Craig, ætatis 24, was admitted into the Infirmary, Jan. 5th, with the following affection of the eye. The right eye-ball was almost completely protruded from the orbit, attended with ectropion and chemosis; the cornea was ulcerated and muddy; the pupil immovably dilated; the vision irrecoverably lost. Her health was impaired—she had constant severe pain in the bones of the orbit and right side of the head, increased upon pressure, and also some rheumatic pains in the knees. The vision of the eye had begun to be dim, about a year and a half before admission, and the sight was destroyed at the end of twelve months. The pain of the head had existed for a year—the prominence of the eye for eight weeks. At the time that the vision was lost, but not afterwards, she had some discharge of yellow fluid from the ear; her mouth was affected at the time of her admission, from the pills she had been taking for five or six weeks.

From the symptoms and history, Dr. Anderson suspected the existence of syphilis, but the patient denied it, and the mercury appeared to have no other effect than that of increasing the debility—opiates and narcotics were employed without effect—the humours were let out with the same ill success, and finally the organ was removed by the knife. A tumour, the size of a hazel nut, nodulated, solid, and bony, was discovered in the floor of the orbit, the pressure of its growth having obviously occasioned the protrusion of the eye. It was now firmly fixed, unable to exert any pressure, and therefore, very prudently allowed to remain undisturbed.

Plummer's pill and decoction of sarsaparilla were employed for some weeks, at the end of which time she got almost well. The pain was remarkably relieved after the operation; and the patient left the house on the 1st of March, her health being good, and presenting no appearance of increase of the growth in the orbit.

III. EXOSTOSIS FROM THE DORSUM ILIUM.

John Henderson, ætatis 39, began in the early part of 1827, to suffer occasional pains about the left hip-joint and sacrum. These gradually increased, extending to the knee-joint and ankle, and after three months were so severe, especially in the groin and the inside of the thigh, as totally to prevent him from walking, whilst a swelling took place between the trochanter and the sacrum. Blistering, cupping, and caustic issue were employed without effect, and the patient was received in the Infirmary on the 8th of September. The left hip, though natural in shape, was greatly swelled, the swelling extending to the crest of the ilium, the median line of the sacrum, and half way down the thigh. There was no pain on pressing the articular surfaces together, or pressing the trochanter, but the patient was unable to rest on the limb from stiffness and pain. The thigh was bent forwards, and the limb seemed elongated half an inch, which was obviously owing to inclination of the pelvis. The health was giving way—the feet cedematous—the urine high coloured and scanty—the body emaciated.

The swelling of the hip and left side of the pelvis steadily increased, he became hectic, and affected with general anasarca, and died on the 22d of November. Diuretics, mercurials, &c. were used—an incision was made just behind the trochanter to ascertain whether or not there existed any matter, and the question decided in the negative; and lastly, the hydriodate of potass was rubbed upon the hip.

Dissection. The hip was about double its natural size, the glutæi were wasted, and more superficial than the tumour. The bones of the left side of the pelvis, excepting the sacrum, were surrounded by a quantity of firm, slightly elastic, and semi-cartilaginous substance, which was

readily cut, and showed on its section a yellowish white appearance. On the dorsum of the ilium its thickness was from five to seven inches, on the internal surface of the pelvis it was not above four, but occupied the situations of the iliacus internus, levator ani, the psoæ, and obturator internus, the traces of which had entirely vanished, save, near the crest of the ilium, a very small portion of the iliacus internus. It also arose from the external margin of the foramen ovale, passed an inch or two down the femur, but did not adhere to its periosteum, and took an attachment to the anterior part of the os pubis, at which situation it was traversed by the femoral artery, unaltered in structure.

Those parts of the tumour that were near the periosteum, were traversed by spiculæ of new bone which was near an inch in thickness, behind the acetabulum. In all the other parts there was only a small quantity of new bone formed near the periosteum, but the tumour was firmer the nearer it was to the old bone, and firmer on the dorsum than inside of the pelvis. The hip-joint was unaffected—the thoracic and abdominal viscera were healthy.

This is certainly an interesting case, and presented many features in common with inflammation, or rather disease of the hip-joint. Dr. Anderson remarks, that it seems to have been the *fungous exostosis* described by Sir A. Cooper, in his Surgical Essays, but still does not think that like other exostoses, this would have been changed into bone, even had its growth and termination been slower.

"I believe it to have been originally a disease of the periosteum alone, and that the spiculæ of bone which were found, do not constitute an essential character of the complaint. I have in my possession a finger which I amputated, on account of a tumour of the same description with this, and although there are a few minute spiculæ at the point from which it took its origin, the whole tumour, which was of sixteen years' standing, and as large as a hen's egg, is still free of bony structure."

That the disease was a periostitis, or disease of the periosteum, there cannot exist much doubt, but we very much question from the spiculæ of bone, deposited in parts, whether that deposition

would not have been greater, had the affection proceeded farther, or even more slowly. We could give a curious instance of bony and cartilaginous formations, if our limits permitted, but this not being the case, we must conclude.

81. HOPITAL ST. ANTOINE.

CASES OF PNEUMO-THORAX. M. RAYER.

Of all the causes of pneumo-thorax, the most frequent is the opening of a pulmonary excavation into the cavity of the pleura. This accident is by no means so infrequent as some people imagine. Two cases have been witnessed in the above-mentioned hospital, in the course of a few months.

Case 1. Pulmonary Tubercles—Perforation of the Left Lung—Pneumo-thorax—Considerable Displacement of the Heart.

Sophy Gonce, aged 23 years, married, and the mother of one child, became affected with catarrh and palpitation of the heart some time previously, and stated that about six weeks before her entrance into hospital she felt something give way, while in the act of coughing, followed by great difficulty of breathing, [obliging her to remain in a particular position, to be noticed presently] palpitation in the right side of the chest, and some spitting of blood. On the 11th of March, the day after she entered the hospital, she presented the following phenomena:—The respiration, short and embarrassed, compelled the patient to remain, day and night on her knees and elbows in bed, the trunk inclining a little sometimes to the right, sometimes to the left. On percussion, the whole of the left side of the chest was extremely sonorous, while the right side sounded dull. The breathing was loudly heard in the upper part of the right side of the chest—no respiration in the left side. In the act of strong inspiration, however, a curious sound was heard through the stethoscope, resembling the blowing of air into a large bottle, (*respiratio amphorica*)—while, in gentle respiration, the tintement métallique (or sound of a drop of water falling into a bottle half full) was distinctly heard. The pulsation of the heart was

evident in the anterior part of the right side of the chest. M. Rayer wrote down in the case-book, as diagnosis—“*pulmonary aphthis—aperture of an excavation into the left pleura—communication of one of the bronchia with this cavity—heart in the right side.*” M. Rayer thought this last was congenital: but in this his diagnosis was wrong. The symptoms above-described continued, with little variation, till she died, on the 29th of March.

Dissection. The left side of the chest appeared more bulged out than the right, and the intercostal spaces wider. When the left side was opened, a strong gust of air rushed out—the lung was found to be almost annihilated, and the pleura covered every where with false membranes. An aperture was readily discovered in the lung, through which the air escaped into the cavity of the chest, when a pair of bellows was applied to the trachea. On more minute examination, a small excavation was found at this place, communicating with one of the bronchia. In the right side there was nothing particular. The heart had evidently been pushed over by the air in the left side of the thorax. There were tubercles in both lungs.

Case 2. Pulmonary, Tubercles—Perforation of the Left Lung—Pneumo-thorax—Displacement of the Heart.

Lemaire, aged 24 years, married at the age of 15, and has borne six children. She entered the hospital on the 17th April, 1828. Stated that she had had some attacks of hæmoptysis the preceding year—and always brought up much expectoration, with very little cough. On examination, pectoriloquism was heard under the right clavicle—the respiration audible behind on both sides. Percussion did not elicit any thing particular. On the 25th April, the patient was found sitting on her bed breathing very laboriously, and complaining of an acute pain under her left breast. On examination by percussion, the left side of the thorax resounded very loudly—the respiration was extremely short, and incapable of being performed in the recumbent posture. When the ear was applied to that side, no respiratory sound could be heard, but only the “*TINTEMENT METALLIQUE,*” as in the former case. Succussion was practised, and a fluctuation was dis-

tinctly heard in the chest. The right side was also sonorous, in a natural degree, and pectoriloquy was recognized under the right clavicle. The patient was occasionally seized with a paroxysm of coughing, during which she brought up a trifling expectoration, exhaling a most intolerable odour. The lower and anterior part of the right side sounded dull, on percussion, and here the pulsation of the heart was distinctly heard. The tongue was red—there was thirst—inclination to vomit—diarrhœa. *Diluent and abstinence.* Between the 25th and 30th the patient continued in nearly the same state, and she was visited by several physicians, among others M. Bricheteau, all of whom agreed that the disease was pneumo-thorax. The left side of the chest became more and more bulged out, and the intercostal spaces wider. Between the 1st and 4th of May, the symptoms were a little mitigated, and the patient walked about the ward a little every day. On the latter day, she was suddenly seized with an increase of the dyspnœa, and quickly expired.

Dissection. M. Rayer, Kapeler, and Bricheteau, assisted at the examination. The right cavity of the chest was first opened, and there the heart was found to be located, being pushed over from the opposite side. The pleura of the left side was seen to be distended with air, and quite transparent. On being opened, a quantity of this fluid rushed out. The cavity contained a moderate quantity also of sero-purulent fluid, mixed with shreds of false membrane. The lung of that side was reduced to one-eighth of its natural dimensions, and compressed against the spine. The whole of the pleura was covered with false membrane, very thin in substance. A small aperture of communication between the air-tubes and the cavity of the chest was discovered in the contracted lung. In this channel of communication there was a small excavation, into which two or three bronchial tubes opened. Both lungs contained tubercles, and there was some bronchial inflammation.

Remarks. The foregoing cases are very interesting in themselves; but we think our readers can hardly fail to perceive that the accuracy of the diagnosis was not turned to any practical utility in the

way of relief to the patients. Now we must acknowledge that the two individuals above-mentioned did not present, on dissection, any organic disease incompatible with life—or, at least, with a prolongation of life. They evidently died in consequence of the effusion of air into the cavity of the chest compressing the lungs, displacing the heart, and impeding the vital function of respiration. They were, in fact, placed as nearly as possible, in the same situation as individuals who had been wounded in the lungs by a small sword, or by the fractured ends of ribs. Why, then, hesitate to make an opening through the intercostal spaces, and extricate the effused air? Every time the patient breathed, some air was forced out into the cavity of the pleura, and it could not get back again through a valvular opening. The obvious remedy was a free exit from the chest, till the channel of communication closed. The operation could not have added to the danger of the patients, and it would have given them a temporary relief at least. We are the more surprised at the inactivity of the medical attendants, in the above cases, seeing that Laennec advises the operation “whenever there is imminent risk of suffocation.” We shall introduce an extract from Laennec, touching the treatment of pneumo-thorax.

“*Treatment.* The exact diagnosis of pneumo-thorax and of each particular variety of it, must not be considered as a matter of purely speculative knowledge, or as useful only in respect of the prognosis of the disease. It is extremely probable, as has been remarked by Hewson and Rullier, that simple pneumo-thorax is the case which holds out most prospect of success from the operation of puncturing the chest. This opinion is corroborated by an observation of Riolan, who informs us that he had several times seen the operation of paracentesis successfully performed on patients considered as affected with dropsy, but from whose chests only air made its escape. In cases of this kind, the puncture with the trocar would unquestionably be preferable to incision. But I would here remark, that, exclusively of the great infrequency of the simple pneumo-thorax, I think it must be generally considered as of no great severity, the gas being more readily absorbed than the liquid effusion. I think

myself justified, at least, in drawing this conclusion from the frequency of gaseous effusions in other situations, which disappear spontaneously, and frequently in the course of a few days or even hours. Of this kind is the pneumo-pericardium, and the various kinds of *pneumarthrosis*, particularly that of the knee, which so frequently arises during the convalescence from articular rheumatism, as well as in other circumstances. On this account, before proceeding to puncture the chest, we ought to endeavour to excite absorption by aromatic and spirituous frictions and by the internal use of slight tonics. Pneumo-thorax complicated with liquid effusion and still more with pulmonary fistula, is a case of a most serious nature, and leaves little hopes of a cure being effected. This, however, must not be considered as quite impossible, even in the severest cases. I formerly proved the possibility of the cicatrization of tuberculous excavations; and the observations of Baqua, Jaymes, and Robin, (*Journ. Gen. de Med.* 1813.) to which I could add a more recent case of the same kind (I mean cases where the patients recovered after the operation of empyema, although the injections thrown into the wound were found to be discharged by the mouth) sufficiently prove, that, even in such cases, we may attempt this last resource with some prospect of success. Even Nature by herself may sometimes overcome more or less completely, a lesion of the kind in question, as I shall show in a case to be detailed at the end of the present chapter. I saw another case of the same kind in 1820, in a man who came on horseback thirty leagues, to consult me. In this person there was every sign of the complication in question existing on the right side. The disease was of two years standing, and nature had already made considerable progress towards a cure, as the affected side was evidently contracted. I ascertained in 1824 that this man was still alive, and attending to his business; he was improved in health, though still an invalid. It cannot be denied, however, that cases of this kind are exceptions to the general rule; and that the two last varieties of pneumo-thorax afford much less chance of success from the operation of empyema, than the simple effusion, whether of air or liquid. Accordingly, I think that

we ought never to attempt this operation in such cases, *unless there is imminent risk of suffocation, or rapidly increasing emaciation and debility*; and never after the long continuance of the disease, unless the lung on the sound side, gives no indication of tubercles. In every other case, I think that we ought to content ourselves with supporting the patient's strength, promoting absorption by the means formerly mentioned, and by a regimen regulated according to the state of the digestive functions,—neither too rigid nor too analeptic."

II. ABDOMINAL PREGNATION.—M. RAYER.

C. Marie Jeane, aged 73, a widow, who had borne children, entered the hospital above-mentioned on the 27th February, 1828, presenting the following symptoms:—several parts of the surface were covered with eruptions of different kinds; one was prurigo—another appeared to be of a *syphilitic* character, although the mouth, throat, and genital organs were free from trace of syphilis. After being treated a certain time for the cutaneous affections, the patient began to complain of head-ach, bad taste in her mouth, anorexia, and pain in the epigastrium. Leeches to the epigastric region. Erysipelas now broke out on the face, and required very active antiphlogistic treatment before it was subdued. A relapse took place, and the old lady sunk under symptoms denoting affection of the brain.

Dissection. The meninges were injected—there was ramollissement in the left hemisphere of the brain—thoracic viscera sound—108 biliary calculi in the gall-bladder. While examining the small intestines a tumour was discovered in the mesentery, containing a small foetus, doubled up, and about two inches in length, with some parts imperfectly developed—others entirely wanting. There was nothing particular to be seen in the uterus or urinary apparatus.—*Archives.*

32. ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.

Mr. Guthrie has been engaged during the last year and a half in ascertaining the efficacy of various remedies in curing the

different forms of acute and chronic inflammation of the eye, and in making comparative trials of each. This has been done not only for the improvement of science generally, but for the purpose of obtaining better methods than those usually pursued for the relief of the more obstinate forms of disease. We think he has succeeded in many points, and it is now our intention to lay several of the cases before the public, in which the new method of treatment has been adopted. We have often heard Mr. Guthrie remark that remedies rarely did good in chronic affections of the eye unless they gave pain, and that even amaurotic cases were not always exceptions to the rule. The excitement of a different action to that already existing in the part, is the principle on which he has acted, and the remedies have been various:—the potassa fusa, argentum nitratum, cupr. sulphas, hydrarg. oxymurias, spirit. rosmorin, spirit. camphore, &c. They have been either used pure or combined in different ways. Mr. Guthrie prefers ointments composed of the argentum nitratum, and the hydrargy. oxymurias. The argentum nitratum has been used from one to 15 grains, reduced to an impalpable powder, carefully mixed with one drachm of adeps. At present from two to ten grains are made into an ointment with 3j. of ung. cetacei. and 15 drops of the liq. plumbi subacet. The oxymuriate ointment is used in the proportion of two to four grains mixed in a similar manner. Mr. Guthrie gives the preference on the whole to the argentum nitratum ointment, called by the patients, from its turning black, the black ointment, at the strength of 10 grains to a drachm of the white ointment, and 15 drops of the lead. These ointments all give pain; in some persons it is considerable, lasting from one to 12 hours according to the length of time the ointment has been made, and the peculiar irritability of the patient. The newer the preparation, the more severe in its effects, the decomposition which takes place not being completely accomplished. It has been used in all kinds of disease, chronic, acute, catarrhal, and purulent inflammations, in iritis corneitis, amaurosis. It has cured cases of all of these complaints, and many which have resisted other means of relief. The re-application of the ointment rarely takes

place before the third day ; sometimes it is repeated on the second, and occasionally only on the sixth, seventh, or eighth. When the effect of them seems stationary. Mr. Guthrie frequently alternates their use with other remedies, such as the sulphate of copper, warm water, blisters, purgatives and cupping.

Case 1. Maurice Brynn, aged 46, has been suffering from sore eyes for the last nine years, and has been frequently unable to get his bread, although he has been under several eminent medical gentlemen and in hospitals for relief, in vain. June 17, came to Mr. Guthrie ; the conjunctivæ of the lids were thickened and irregular on their surface, and very red, the eyeball vascular, the corneæ muddy, sight very imperfect. The ung. argent. nitrat. was immediately applied to both, six grains of calomel with colocynth at night, and an ounce of sulph. of magnesia in the morning. 21st. The same repeated—absented himself until the 8th July, when recourse was again had to the ointment, the eyes being better. 10th Ung. argt. nitrat. pil. hydr. subm. gr. vj. mag. sulph. 3j. 15th. Ung. argt. nitrat. 17th. Rep. ung. et pil. 19. Ung. 21st. Ung. argt. nitrat. et pil. 24th. Declares he is much better than he has been for years. 26th, 29th, 31st. Aug. 2d, 5th. Improvement continues, and says he is wonderfully well, and shall attend from time to time.

Case 2. Eliza Edwards, aged 18, had had bad eyes for several years, and attended different gentlemen, as well as at this Infirmary, for several months, at various times, with little relief. In the beginning of January last, began the use of the ung. argent. nitrat. which she has continued until the middle of June, with different intervals, taking nothing but aperient medicines occasionally. The relief obtained was such, that in May she thought herself nearly cured, and her father returned thanks to Mr. Guthrie ; but she has remained till now, the 17th June, in order to secure her from relapse.

Case 3. Thomas Walsh, admitted March 3, having had sore eyes for more than five years, and has been under the care of several gentlemen during that period. The conjunctivæ are thickened and granulated—the corneæ opaque and

vascular—he sees very badly. The ung. argent. nitrat. to be applied every visit, with aperients. 10th April. The inflammatory appearances of the eyeball, as well as the muddiness, nearly removed. He declares the application has acted like a charm, and that the left eye is cured. Aug. 12th. The ointment has been continued twice a week to the right eye, which he says has some little remaining the matter with it.

Case 4. William Wood has had sore eyes for more than two years and a half—was attacked by inflammation of the eyes, which was very severe. After a time, he applied to Mr. Guthrie ; but not getting well, he was induced to leave him, and go to another gentleman, who took him into an hospital for a month, and made his mouth sore. He then became an out-patient, and remained under his care for six months longer, but without any advantage. His disease having lasted now 2 years, for the last eleven months of which he was unable to see to get his bread, or do any thing ; he returned to Mr. Guthrie, Jan. 3d, 1828. The ung. argent. nitrat. was applied to both eyes, and repeated on the 6th and 10th, 15th and 20th. On this day he declared he could see to do many things he had not been able to do for a year, and that he was very much better. The ointment was repeated 23d, 27th, 31st, Feb. 5th, 7th. 19th. Absented himself from the 7th to the 19th, having been able to go to his work, which he is now able to do. 21st, 26th. Ointment applied. March 10th. Says he now goes to work regularly, but will attend from time to time.

April, May, June. Comes occasionally, and has the ointment applied to one eye ; the eyeball is free from disease—the eyelids have still some chronic inflammation and redness affecting them, put he is careless about it, as it does not interfere with his pursuits. He has only taken a purgative occasionally.

Case 5. Emma Dagnie, aged 10, 12th June. Catarrhal inflammation of both eyes. On the left cornea there is a small ulcer : the complaint has lasted six weeks, and came on after the measles. Hydr. submur. gr. iv. h. s. Magnes. sulph. 3ss. mane. Ung. argent. nitrat. to both eyes.

14th. Much better, repeat the ointment.

17th. Nearly well—repeat.

19th. Well.

Case 6. John Davis, aged 45, admitted July 4, 1828; pustular inflammation, which commenced suddenly last Tuesday morning with a sharp, shooting, pricking pain, as if something had got into the eye. There is a great discharge of hot tears—no pain in the forehead, but a sensation of fulness and intolerance of light. The ung. argent. nitrat. applied to both eyes. Pil. hydr. subm. gr. vj. statim—magnes. sulph. 3j. omni mane.

5th. Better, pil. hydr. c. gambogia, gr. x. h. s.

6th. Ung. argent. nitrat. cum pilulis, hydr. c. gambog.

7th. Ung. argent. nitrat. Cured.

Case 7. Eliz. Lewis, 26th July, 1828, inflammation and thickening of the semilunar fold of the conjunctiva of the right eye, extending inwards—pain and discharge of tears—intolerance of light slight—no internal medicine. Ung. arg. nitrat. 29th. Better—rep. 31st. rep. Aug. 5. Cured.

Case 8. Nicholas Metrelin, aged 49, July 31, catarrhal inflammation severe and acute, and of seven days standing. The ung. argent. nitrat. to the right eye. The ung. oxymur. hydr. to the left. Aug. 3. Says the ointments have done him a great deal of good, and is very thankful for the relief. Repeat the ointment. 5th. Is nearly well. 7th. Discharged cured—no internal treatment.

Case 9. Henry Clifton, aged 14, August 5, 1828, catarrhal inflammation slight. Ung. argent. nitrat. August 7. Cured by one application.

Case 10. Edward Dudley, aged 5, Aug. 5, 1828, pustular inflammation. Ung. Argent. nitrat. Pulv. jalap. c. 3ss. 7th Cured.

83. HOPITAL SAINT LOUIS.

I. ECZEMA RUBRUM.

Antoine Massonot, ætatis 26, of strong and sanguineous temperament, consulted M. Bielt in March, 1825, in the following condition. The hair, which had recently been cut, was soaked in an

abundant ichorous discharge; the scalp was very red, and enveloped, as it were, in a whitish and shining kind of cap, resembling asbestos in appearance; this cap came away in fine scales, beneath which appeared innumerable vesicles. The ears and meatus externus were covered also with small white scales, and the trunk and axillæ were likewise affected. The patient, when young, had twice had the itch, of which he was perfectly cured. At the age of 18, he was subject to epistaxes, and at 22, after leading an irregular life, an eruption appeared upon the face, and excrescences on the gland of the penis, for which he was put under several mercurial courses. In the winter of 1824, the eruption disappeared, but as the cold weather went off, the combination of symptoms, for which he consulted M. Bielt in the month of March, was gradually established. The patient had made trial of the mineral waters of Barège without advantage, and now, after seeing M. B. determined on entering the hospital. The digestion was good, but M. Bielt, notwithstanding, resolved on employing the purgative plan of Dr. Hamilton, under the influence of which the little scales fell off, the kind of cap upon the scalp became loosened, and moisture re-appeared in abundance.

A gap intervenes in the report until January of the present year, when the state of the patient appears to have greatly improved. There merely existed on the scalp, a few small lenticular scales, which were readily detached; but the itching continued unabated. The patient, perceiving the excellent effects of the purgation, had taken clandestinely much greater doses than were ordered, and at last paid the penalty in the shape of disturbance of the bowels, and diarrhoea. These symptoms were checked by pediluvia, infusion of mallows in emulsion, and pills of the pulvis lactuce and extract of hemlock, but during their use two large red patches, without any vesicles appeared upon the temples. In April, the patient was ordered the vapour bath, and frictions with ioduret of sulphur. On the 24th of May, the bowels having resumed a healthy condition, he began to rub in upon the tongue, 26^{me} and afterwards 3,6^{me} of muriate of gold. Under this treatment, the disease disappeared—the hairs became natural, and healthy at their roots—the scaly eruption

vanished from the scalp—the itching subsided, and the patient was discharged on the 24th of July. The excrescence on the gland had been snipped off with scissors, and subsequently cauterised with the nitrate of silver.

The *eczéma rubrum*, according to M. Biett, generally occupies the head, seizing on the scalp and the face. It begins with an eruption of extensive and numerous vesicles, accompanied with a bright erythematous red. The vesicles soon give way to squamæ with a constant discharge, the itching is great, the ears and meatus auditorius very frequently affected, the scalp is enveloped in an “*anianthus-like*” cap, which has caused M. Alibert to give it the name of *TINEA ANIANTACEA*.

II. ELEPHANTIASIS ARABUM.

Two patients affected with this melancholy and disgusting affection are at present inmates of Saint Louis. The one is an old man, sixty-five years of age, who has spent a great part of his life in the Antilles, the other a child born in Saint Domingo, and not having been above eighteen months in France. In the former the disease was much farther advanced than in the latter. Its ravages are confined to the head and face, the trunk of the body being totally exempt. The tongue is affected with tubercles, which have even gone on to ulceration in the palate; the pharynx and larynx are apparently affected, the voice being hoarse. The iris is irregular and deformed on the right side, but almost entirely destroyed on the left. The vision on this side is lost of course; on the other it is very much weakened. In the child the disease is not near so extensive, the palate and tongue being sound, but the voice is rendered hoarse notwithstanding. This hoarseness of the voice the reporter considers a very common symptom, and constantly present in the cases of leprosy, which exist in great numbers in the neighbourhood of Marseilles, and the villages round about Martignes. The treatment adopted in the cases the subject of report, is a vegetable diet, the exhibition internally of the tincture of iodine, in doses of 15 or 20 drops, and frictions with the ioduret of sulphur, rubbed upon the tubercles. The young patient promises fair for recovery, the

old one possesses a very indifferent chance of it.

Some interesting clinical remarks on the disease were made by M. Biett at the bedside of the patients. This physician has never seen a case of true elephantiasis Arabum in France, unless the individual had either been born between the Tropics, or dwelt there some time. The reporter, however, believes from the cases he has witnessed, that the disease may be developed in France, and especially the south. With regard to diagnosis; the yellow colour of the skin, from which the tubercles arise—the peculiar appearances presented by the latter, separate at first, but afterwards agglomerated together, indurated, irregular, and insensible—the partial death of the parts which are attacked—the peculiar aspect—and hoarseness of the voice, are symptoms which cannot be mistaken. The tubercles may ulcerate, but generally the matter is pent up within them, when it forms, and is not discharged for a great length of time. The eruption is mostly confined to the limbs and the face, and seldom seizes on the trunk.

M. Biett has seen the tubercular deposits in the alimentary canal, especially in the neighbourhood of the ileæ-cæcal valve. He has also seen ulceration of the arytenoid cartilages and chordæ vocales—the liver enlarged and tuberculated—the bones sometimes altered and softened, their cancellated structure inflamed. The ulceration which takes place at the summit of the tubercles on the arch of the palate, penetrates by a sort of infundibulum, into the interior of the mucous follicles, a circumstance which leads M. Biett to believe, that it is in these that the tubercles originate. The skin over the tubercles in the cutis or sub-cutaneous cellular membrane, is sometimes so attenuated, as to look like the finest parchment.

We pass to the treatment of this curious and interesting malady. Mercury is by no means a favourite with M. Biett, indeed he believes that in one instance, that of an old lady, it induced the formation of tubercles in the lungs. Arsenical preparations are said to be useful, the Indians employing the protoxide in combination with pepper. M. Fodéré praises the remedy highly, and the “*pilulæ asiaticæ*” appear to have occasionally succeeded, though attended with very bad consequences in a case which

was recently received in the Saint Louis. In one case, M. Bielt employed the muriate of gold in frictions on the tongue, with partial good effects. The tincture of iodine, with frictions of the ioduret of sulphur, has removed the tubercular deposits from the limbs, and restored sensibility to the parts and power to the legs. At the commencement of the disease, before the development of the tubercles, rubefacients and blisters to the part are of service.

84. WORCESTER INFIRMARY.

MISPLACED COLON, WITH ENTERITIS.

Ann B. was a patient in the Worcester Infirmary, in the course of the year 1821, with a fixed tumour in the right iliac region, painful and tender. The bowels were costive—abdomen tense—tongue foul—pulse quick and weak—emaciation considerable. Under the employment of a seton in the situation of the tumour, low diet, and occasional doses of castor oil, the tumour very nearly disappeared, the other symptoms yielded, and she gradually recovered.

After a violent paroxysm of anger in October, 1823, she was suddenly attacked with a fixed and very violent pain in the bowels of the "true inflammatory character." The seat of the former disease was the most tender part of the abdomen—the bowels, at first loose, became afterwards obstinately bound, and she vomited bilious matter. The treatment consisted in local and general bleeding, in spite of which the abdomen, in 72 hours from the seizure, became tympanitic—the pulse was too quick to be counted, and the patient soon afterwards expired.

Secitio Cadaveris. The omentum, at its lower edge, was inflamed, and adherent in the right iliac region to the peritoneal lining of the abdominal muscles, as well as to the subjacent intestines. A portion of the omentum was sphacelated. The transverse arch of the colon, instead of traversing the epigastric region, descended from the right hypochondriac to the right iliac, and then again ascended to the left hypochondrium, from which it continued its natural course. The peritoneal coat of the centre of the arch had contracted the principal adhesions with the omentum,

and was thickened to nearly a quarter of an inch, over a space about as large as three half-crowns. Part of the peritoneal coat of the colon was gangrenous, but the villous was healthy, and throughout the whole tract of the intestines. The diseased part of the colon was adherent to the cæcum below, but the latter was free from disease. Lymph was thrown out on the folds of the intestines, and there existed a pint of serum in the cavity of the peritoneum.

In the following remarks, we agree with the reporter.

"The diseased portion of the intestine, which evidently constituted the original tumour, was, from its situation, considered by all who saw her, when she was in the Infirmary, to be the cæcum. The fact of the displacement of the transverse arch, could not be ascertained in the life-time of the patient. This case shows how rapid and severe is acute inflammatory action, when it takes place in a morbidly altered structure, in which, perhaps, chronic inflammation is going on. It shows, too, that those violent passions of the mind which augment generally the force and rapidity of arterial action, are powerful exciting causes of local inflammation."—*Midland Reporter*, No. 1.

85. HÔTEL DIEU.

PERFORATION OF THE ORIGIN OF THE DUODENUM FROM ULCERATION OF THAT INTESTINE—SUPPURATIVE PERITONITIS. By M. ROBERT.

Case. Louis Laurin, aged 17 years, had complained for some months of fugitive pains in the epigastrium. For the last six weeks, there had been diarrhoea, and for ten days past there was loss of appetite, nausea, and general malaise. On the 10th of December last, three hours after dinner, he was seized suddenly with most violent pains in the region of the stomach, which radiated thence over the whole abdomen. He vomited up what he had eaten, mixed with some bile and mucus. A physician who was called in, considered the case as one of indigestion, and prescribed chamomile tea and a lavement. Next morning, the patient was carried to the HÔTEL DIEU. His face was pallid, skin covered with cold perspiration, pulse small and quick,

abdomen tense and very painful, tongue pale and moist, bilious vomiting. Forty leeches to the abdomen. The patient died at 4 o'clock the same afternoon.

Dissection. The abdomen was filled with a gaseous and fetid fluid—peritoneum inflamed in streaks—intestinal convolutions agglutinated together. There was, in some points of the intestinal tube, a veritable sub-peritoneal emphysema. The mucous membrane of the stomach appeared sound. At the origin of the duodenum, immediately beyond the pyloric orifice of the stomach, there was an oval ulceration, three or four lines in diameter, with smooth and somewhat raised edges. In the centre of its bottom, the peritoneal coat was perforated by a small opening, a line in diameter, thus affording a free communication with the cavity of the abdomen. Near this ulceration, a second was discovered, not quite so large, and not penetrating deeper than the mucous membrane. The rest of the intestinal canal was perfectly sound.

It is very rare to find the duodenum perforated by the ulcerative process, the stomach and intestinal canal remaining in a healthy condition.—*Biblioth. Med. Juillet.*

86. ST. GEORGE'S HOSPITAL.

ERYSIPELAS.

The following is a highly interesting case.

JOSEPH SMITH, ætatis 53, was admitted into hospital, under the care of Mr. Brodie, on the 27th of August, in consequence of extensive varicose ulcers of the right thigh and leg. The limb had been affected in a similar manner twenty years ago, but the ulcers at that time were perfectly healed, and broke out no more till within three months, or so, previous to admission. The treatment which was ordered was—quietude in bed—bandages—and strapping. These means were, accordingly, adopted, and the plaster renewed about every other day. On the 3d of September, the limb was strapped as usual, and the dressings were about to be removed on the 5th, when the thigh and the leg were found to be enormously swollen, and the seat of extremely severe erysipelas. The colour of the inflammation was dull and opaque, but not absolutely dusky—the pulse weak and rapid—the tongue rather

foul, but not brown—the surface much heated—the countenance sallow, and marked with anxiety. The bowels were confined, but the patient had very little thirst, and no head-ach whatever. On inquiry, it was found that on the preceding evening, he complained of some nausea, without any shivering or actual sickness. He suffered much pain that night and next morning, on account of the tightness of the bandage, which caused, as has been stated, much swelling above and below. Violent applications had been used by the dresser, to take down some high granulations, but these were desisted from several days previous to the 5th.

Cal. gr. iij. Pulv. Jacob. gr. iij. statim. haust. sennæ post 6 horas—Lot. frigid. membro affecto.

In the evening, the pulse was 150, and tremulous; tongue white and furred; skin burning hot. The bowels had acted three times since the morning, and the patient declared he was better. On the 6th, there appeared some improvement. The pulse had got down from 150 to 126, the skin was not so hot, the tongue a little cleaner, the erysipelas fading in parts of the thigh. On the next day, however, the features of debility were more unequivocal, and verging a little to the typhoid character. The tongue was now dry—the pulse had again risen to 140—the animal powers seemed low and weak.

R. Liq. ammon. acetat. ʒss. Ammon. carb. gr. v. Mucilag. acacia. ʒij. Syrup. ʒj. Aq. distill. ʒv. M. 6tis horis.

When we saw him on the 8th, his appearance was most unpromising. The hue of the countenance sallow before, had now become sallower still, anxious, and half-hippocratic; the tongue was glazed with brown, and as dry as a board in the centre, but red at the edges, and tip—the pulse was very rapid and weak—skin hot—manner very hurried and delirious. Suspecting the existence of thoracic or abdominal inflammation, we examined the patient attentively, but discovered no symptom of either. The erysipelas was fading, but dusky; no particular pain on pressure of the thigh, or over the femoral vessels.

Haust. cinchon.—tinct. opii M. iij. M. 6tis horis.

On the 9th, he appeared to be sinking, the surface having assumed a yellow, bilious hue—the erysipelas spreading up

the trunk, and having terminated in vesications on the outside of the thigh—the tongue being brown—mind wandering—subultus. He died this evening.

On dissection, it was found that the knee-joint contained four ounces of pus, and its cartilages were extensively ulcerated. The blood-vessels were healthy, but serum and lymph existed, and that to some extent, in the cavity of the pleuræ.

The above case was curious in many respects. The sudden, and almost universal appearance of inflammation on the limb, foretold, but too truly, how severe, or even fatal the attack would be. When we saw him on the 8th, the general character of the symptoms, the extraordinary

depression, the delirium, not loud nor loquacious, but rather a quickness of manner, and eager desire to convince you he was well, the fallow, we should say, icteritious hue of countenance, and lastly the deep and inexpressible anxiety depicted in the features, induced us to suspect the formation of matter in the chest, the abdomen, or vessels of the thigh. In this, as it happened, we were partly deceived, but the purulent depôt in the knee-joint, and destruction of its cartilage, without even a symptom, or shadow of a symptom, during life, is analogous in principle, with the other more frequent affection. The whole is instructive in the highest degree.

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We received the following communication too late for the text of the Journal, and are obliged to insert it in this place. The specimen of ergot seems excellent, and we thus give publicity to the fact, that the secale cornutum will, in all probability, be afforded in abundance by our own farmers.

16th Sept. 1828.

TO DR. JOHNSON.

Sir,

Lately having occasion to visit Southport, and on strolling about the Sandhills of that interesting spot, I accidentally stopped at a barn, where a farmer was about to clean some rye. I asked him if ever he had perceived a disease in the plant which stuck out from the ear, not unlike the spur of a dung-hill cock. His answer was, he never had detected any thing of the kind. Not satisfied with this reply, I began to turn over about a bushel of that grain which he had sifted on the barn floor, and instantly found the specimen I herewith send you. Never having heard that the English rye was infested with the ergot, and knowing that my York druggists were in the habit of procuring it from our Transatlantic brethren, I thought it right to apprise you, with a view, not only to render it more generally known, but to lower its price in the market.

If, however, you are not aware that a supply of this excellent drug can be furnished within the compass of Britain, I should feel obliged by your giving publicity to this in your next Quarterly, with any remark your judgment may suggest.

I receive your publication quarterly, and shall look with anxiety to your remarks.

I am, Sir, with great respect, truly your's,

J. HAMERSON.

Elland, near Halifax, Yorkshire,
Sept. 13th, 1828.

UNIVERSITY OF MICHIGAN



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